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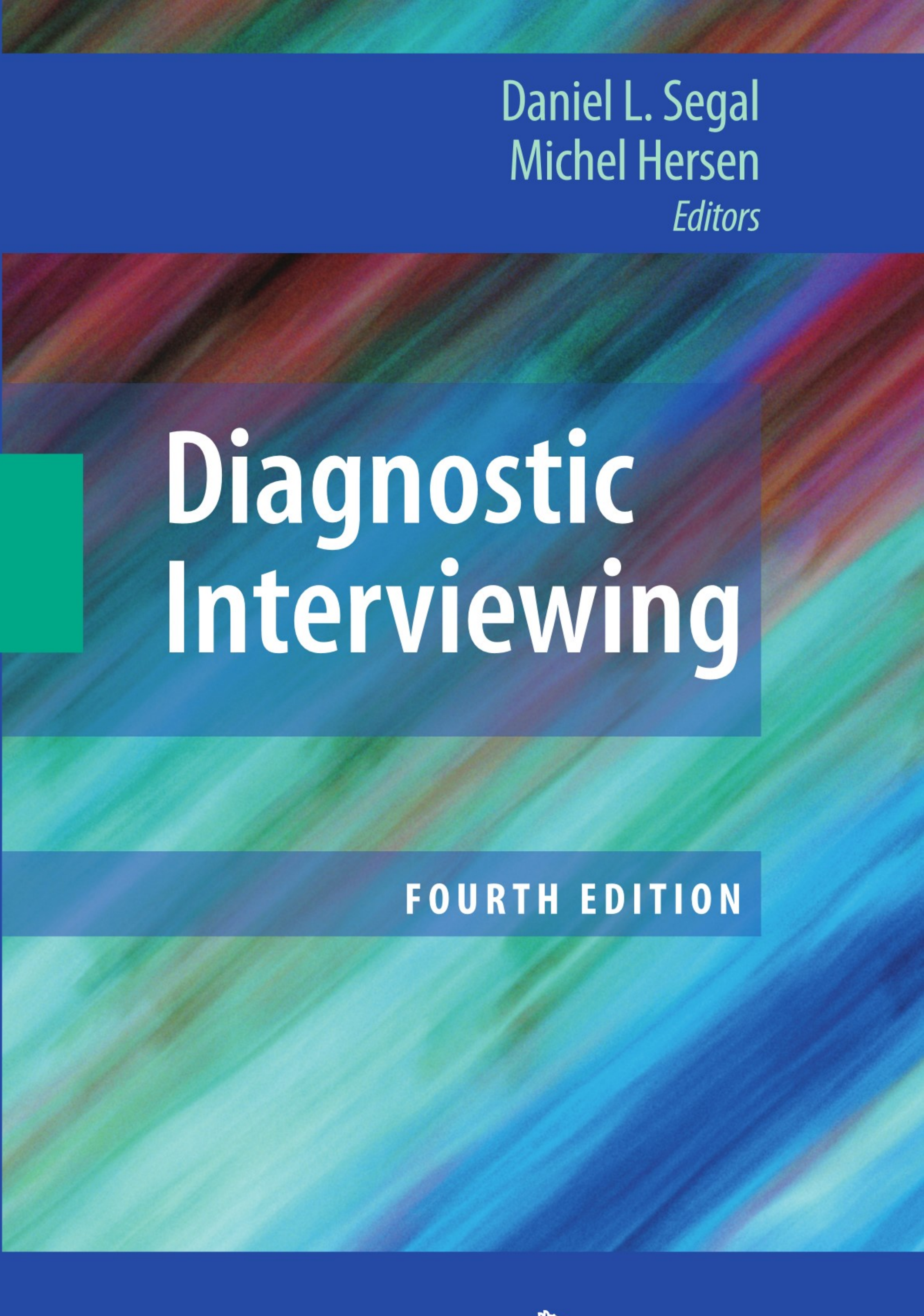

Diagnostic Interviewing

FOURTH EDITION

Springer

Diagnostic Interviewing

Daniel L. Segal • Michel Hersen
Editors

Diagnostic Interviewing

Fourth Edition

Springer

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Michel Hersen: To Vicki
Daniel L. Segal: To my mother Anne
and late grandmother Harriet who always
supported me and my education.

Preface

The first three editions of this book had Michel Hersen and Samuel M. Turner as its editors. A fourth edition had been talked about by the two original editors, but the untimely death of Dr. Turner intervened. Subsequently, Daniel L. Segal, a long time colleague of Michel Hersen, graciously offered to be involved in the project, and this is the result of his participation.

As stated in the first edition of this book, one of the most difficult milestones in a new clinician's career is the completion of the first interview with a real live client (as opposed to role playing with other students). Generally, such endeavor is fraught with much apprehension. However, if the interview goes well there is much rejoicing. On the other hand, if the interview falls flat, there will be considerable consternation and concurrent negative feedback from the supervisor. Irrespective of the amount of preparation that has taken place before the interview, the beginning clinician will justifiably remain apprehensive about this endeavor. Thus, the first three editions of *Diagnostic Interviewing* were devoted to providing a clear outline for the student in tackling a large variety of clients in the interview setting.

In consideration of the positive response to the first three editions of this book, we, and our editor at Springer, Sharon Panulla, decided that it was time to update the material. However, the basic premise that a book of this nature needs to encompass theoretical rationale, clinical description, and the pragmatics of "how to" once again has been followed. Thus, the reader will find consistencies between this fourth edition and the prior ones that have been published. We still believe that our students definitely need to read the material covered herein with consummate care. We are particularly concerned that in the clinical education of our graduate students, interviewing unfortunately continues to be given insufficient attention. Considering that good interviewing leads to appropriate clinical and research targets, we can only underscore the critical importance of this area of training.

Twenty-six years have elapsed since publication of the first edition, and many developments in the field have occurred, including repeated revisions of the DSM system of classification and diagnosis. However, the basic structure of our new edition remains identical to those of the prior ones, in that Part I deals with general Issues, Part II with Specific Disorders, and Part III with Special Populations. In some instances, the contributors are identical; in others, co-authors have been changed; in still others, we have entirely new contributors. However, all the material is either updated or completely new. Of the 21 chapters in our book, three are completely new (Chaps. 3, 5, and 21) and seven have been updated (Chaps. 2, 4, 11, 14, 17, 18, and 20). Eleven chapters that originally appeared in the third edition have been written by different authors (Chaps. 1, 6, 7, 8, 9, 10, 12, 13, 15, 16, and 19).

Chapters in Parts II and III generally follow the outline below:

1. Description of the Disorder, Problem, or Special Population
2. Procedures for Gathering Information
3. Case Illustration
4. Standardized Interview Formats
5. Impact of Race, Culture, Diversity, and Age
6. Information Critical to Make a Diagnosis
7. Dos and Don'ts
8. Summary
9. References

Many individuals have contributed to the development and production of this new edition. First, we thank our contributors for sharing with us their clinical and research experience. Second, we thank Carole Londeree, Terri Draper, and Blake Kirschner for their technical assistance and help with the preparation of the index. Finally, we once again thank Sharon Panulla for her appreciation of the need for this fourth edition of our text.

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Chapter 1
Basic Issues in Interviewing and the Interview Process

Daniel L. Segal, Andrea June, and Meghan A. Marty

The ability to conduct an efficient and effective clinical and diagnostic interview is arguably one of the most valued skills among mental health professionals. It is during the interview that the clinician learns about the difficulties and challenges experienced by the client and begins to form the foundations of a healing professional relationship. Although the metaphor is not a novel one, the job of the interviewer may be likened to that of a detective trying to collect enough data and organize the clues to "solve the mystery," in this example, the presenting problem of the client. The most important aspect of this detective metaphor is that effective interviewers (detectives) are served well by their natural curiosity (truly wanting to understand all aspects of the client's experiences, no mater how painful or uncomfortable) and the thoughtfulness of their approach (being guided by strategies and principles for gathering data while also forming an emotional connection with the client).

Broadly construed, the clinical interview is the foundation of all clinical activity in counseling and psychotherapy (Hook, Hodges, Segal, & Coolidge, 2010). Indeed, one cannot be a good clinician without well-developed interviewing skills. Although specific attention is often paid to the initial clinical interview (or first contact between clinician and client), it is ill-advised to think that clinicians first *complete* an interview and *then* start treatment. Rather, it is more accurate to view the clinical interview as an *ongoing* part of the psychotherapeutic process (Hook et al.). For the beginning clinician, trying to manage the content and process of the interview can seem like a daunting task, one that often evokes considerable anxiety. However, with guidance and practice, clinical interviewing skills typically improve and eventually become second nature, an important part of the clinicians' repertoire. The purpose of this chapter is to discuss and elucidate some of the factors that can facilitate the interview process for the beginning clinician as well as the more seasoned one. The overview presented in this chapter of the basic issues regarding clinical interviewing will also set the stage for the following chapters in this text

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that provide considerable depth in the major areas of clinical and diagnostic interviewing. We begin with discussions of the different settings in which interviews occur, confidentiality, and the basic skills used in interviews. Next, we describe the importance of understanding the impact of client diversity on the interview process and pay targeted attention to the issues faced by mental health professionals who are in the beginning stages of professional development as a clinician and interviewer. We conclude this chapter with a discussion of some dos and don'ts of clinical and diagnostic interviewing.

1.1 The Impact of the Interview Setting

Perhaps the first critical factor that influences the nature of the interview is the setting in which the interview takes place. There are a variety of settings in which interviews may occur and the type of setting often determines how the client is approached. Specifically, the setting will help determine the depth and length of the interview, the domains of functioning that are assessed, the types of questions that should be asked, and the degree of cooperation that can be expected. For example, the level of cooperation that can be expected from a juvenile delinquent forced to participate in court-ordered psychotherapy will be substantially different than that from an adult or older adult who is burdened with responsibilities of caring for an ill spouse or parent and who is eagerly seeking psychotherapy at a community mental health clinic. As such, each interview will require a different approach because of the circumstances of how each client comes to be interviewed and the expectations established for client behavior. To address the issues of the setting on the interviewing process, we discuss emergency and crisis settings, outpatient mental health settings, medical settings, and jail, prison, and courthouse settings.

1.1.1 Emergency and Crisis Settings

Emergency and crisis settings are diverse, and include general hospital emergency rooms, inpatient psychiatric hospitals, and crisis centers. Clients who may be encountered in these settings include individuals with acute medical problems that are compounded by psychiatric factors, people who are brought for psychiatric evaluation by law enforcement or emergency medical personnel, individuals involved in voluntary or involuntary psychiatric commitment proceedings, and people who are experiencing an acute, often volatile crisis situation (Turner, Hersen, & Heiser, 2003). Individuals requiring emergency care may exhibit psychotic disturbances, including active hallucinations and/or delusions (e.g., schizophrenia, bipolar disorder); drug and alcohol problems, including severe intoxication and disorientation; organic brain syndromes, such as a head injury, delirium, or other types of neurological disorders; mood disorders (e.g., severe depression with psychotic features and/or active suicidal thoughts); and personality disorders, especially those characterized by volatile and impulsive behaviors (e.g., borderline personality disorder).

Because the interview occurs under emergency conditions, clinicians should be prepared to alter the style and format of the traditional interview. Clients in emergency settings are often frightened by their perceptions and feelings, as well as by the surroundings in which they find themselves, and they often exhibit extremes in emotions. They may be too agitated, frightened, or paranoid to provide detailed histories. Thus, the goal in such settings is to gain enough information to make a tentative diagnosis and offer emergency treatment planning. In emergency settings, a careful examination of the client's mental status is more important than a detailed social history or formal psychological testing. Keep in mind that a calm and understanding attitude on the part of the clinician can increase the client's comfort level enough to allow the interviewer to obtain a reasonable sense of the nature of the problem (Turner et al., 2003).

1.1.2 Outpatient Mental Health Settings

Compared to clients seen in emergencies settings, clients served by outpatient community mental health centers and private outpatient practices will have a more varied range of psychopathology. Whereas psychotic disturbances and suicidal ideation may be encountered within this setting, typically clients are more stable and not in severe enough crisis to warrant hospitalization. Therefore, the nature of the interview will be considerably different from that in emergency and crisis settings.

The objective of the interview in this setting is to learn as much about the client's current psychological and emotional functioning as possible, including the client's reasons for seeking psychotherapy, and to fully explore the client's personal history (often called the social history) to put the client's current problems in a proper context. The interview is typically guided by the problems and fortitude of the client, and because there is generally little or no mystery for the client as to the purpose of the interview, there is generally less resistance during the interview. Thus, the interviewer will typically have more time and less trouble in conducting a comprehensive interview, which typically occurs during a 60–90-min session. A thorough understanding of the client's current and past difficulties and the contexts in which the struggles occur is necessary for the clinician to develop an initial conceptualization of the problem and to develop an appropriate initial treatment plan.

Compared to the pressure of emergency settings, interviewers in outpatient settings are usually afforded the luxury of time to establish rapport with the client and lay the groundwork for a productive therapeutic relationship. In outpatient settings, clients may be inquisitive about the nature of their problems or disorders (sometimes requesting a formal diagnosis), the causes of their problems or disorders, and the pragmatics of treatment (e.g., fees, length of treatment, theoretical orientation, or general approach of the clinician). These questions should be addressed candidly and sensitively to foster trust in the relationship (Faust, 1998). Of course, there is no crystal ball to precisely determine how long treatment will last for a particular client, but it is often helpful to establish a general time frame with the client and to secure an initial agreement to treatment with a plan to review progress in a short period of time: "How would you feel about making an initial commitment to weekly psychotherapy for the next 8 weeks? At the end of that time (if not sooner), let's evaluate how we are doing together and decide how we should proceed, to determine if we need to contract for another series of sessions." The manner in which questions about diagnosis and treatment are answered will help the client develop a "proper" perspective on his or her treatment; specifically, what can and cannot be done, and what the long-term prognosis entails (Turner et al., 2003). Even if the client does not request such information, it may be helpful for the clinician to address these types of issues with the client at the end of the initial interview.

1.1.3 Medical Settings

Medical settings (e.g., medical school hospitals, rehabilitation hospitals, Veteran's Affairs medical centers) present a unique challenge for clinical work. Often, medical patients have not requested to consult with a mental health professional, but rather the referral is the decision of the treating physician. The reason for the referral may or may not have been explained to the patient and therefore the patient may be initially hesitant or reluctant to communicate to the clinician and, in some cases, may even refuse to be interviewed (Faust, 1998). Individuals in this setting frequently do have various medical illnesses and therefore have defined their "problem" as a medical one. As such, they may not understand why a mental health professional has been sent to see them.

It behooves the clinician to be prepared for varying levels of knowledge about and active participation in the referral process, and thus at the beginning of the interview should introduce him or herself, explain the purpose of the consultation, and state who requested it. In general medical settings, the clinician is likely to garner cooperation with the medical patient when the clinician presents herself as an information gatherer and acknowledges the client's physical condition without immediately suggesting that there is a psychological disturbance, even if one is suspected (Turner et al., 2003). If the clinician is fortunate enough to work within an interdisciplinary team within a medical setting, the interview can be framed as "comprehensive care" which may decrease some of the stigma associated with mental health treatment.

In this setting, clinicians also should be prepared to adjust the format and length of the interview according to the needs of the medical patient. Depending upon the medical conditions experienced by the patient, he or she may be in considerable discomfort which impacts one's ability to engage in a dialogue and answer questions. Some medical patients may need a period of cultivation (e.g., having a few informal visits to get to know the patient) before they are willing to delve into emotional concerns or psychological topics, requiring the clinician to be flexible on the number of visits needed to complete the interviewing task. Clinicians in medical settings also need to be mindful of the other professionals working within the facility and the schedules to which these other professionals must adhere. Some flexibility and coordination with the staff helps to ensure the interview sessions and treatment sessions have as few interruptions as possible.

If the clinician is a consultant in the medical setting, it is particularly important to avoid being manipulated into siding with the client against the physician. It is critical to maintain the stance of an investigator with no specific position. Consultant clinicians must remember they are invited by the treating physician to render their expert advice on a particular problem. A major difficulty can arise in this setting if negative statements and judgments about other aspects of the patient's care are rendered by the clinician (Turner et al., 2003). This type of behavior will most certainly have a negative impact on the doctor–patient relationship and the doctor–clinician relationship to work in the best interest of the medical patient.

1.1.4 Jail, Prison, and Courthouse Settings

Depending upon the reason for referral, these settings can have a distinctly unpleasant adversarial tone. Clients may range from being very resistant and defiant of the entire process to being overly attentive and concerned. Some clients, in fact, may honestly want psychological assistance. A client's motivation to be truthful, forthright, and forthcoming with information will also depend upon the perceived referral question and the circumstances of the interview (Faust, 1998).

In this setting, privacy is likely to be limited when conducting interviews as other people (e.g., fellow inmates, guards, attorneys) may be within listening proximity to the interview. Additionally, because many of these evaluations are court mandated, confidentiality of records does not apply (Faust, 1998). In these cases, clinicians should be frank with the client about these limits and the role of the clinician. The clinician may also be restricted by time in this setting. In an emergency hearing, for example, the clinician may have limited time to interview the client and make recommendations. At other times, the clinician will need to coordinate her schedule with others at the jail or prison, limiting flexibility as compared to some other settings.

During interviews in this setting, the clinician may want to look for inconsistencies in the client's behavior and self-report because there may be perceived benefits to the client to either minimize reports of psychopathology or conversely to exaggerate mental health concerns. Interviewing and observing the significant people in the client's life (e.g., spouses, parents, children) may also be informative, when possible (Faust, 1998). For example, referrals concerning adult guardianship involve the court evaluator interviewing both parties vying for guardianship as well as other people involved in the adult's life (e.g., guardian ad litem, the adult protective agency worker, the adult's children, other kin). These additional interviews can help to verify information, uncover inconsistencies, and ultimately help the clinician determine the most optimal course of action.

1.2 Confidentiality

A hallmark feature of a professional therapeutic relationship is *confidentiality*. Indeed, confidentiality is a critical aspect to address in an interview. Guidelines for psychologists regarding confidentiality are established by the American Psychological Association (APA) in the *Ethical Principles of Psychologists* (APA, 2002). Because a breach in confidentiality is such a serious action, clients must be informed (e.g., verbally or in a written format) of the limits of confidentiality at the onset of a clinical interview, prior to any other information discussed. It is best to take a straightforward approach when discussing and educating clients about the limitations of confidentiality. Although there is no clear answer about whether the conversation should take place at first contact over the phone or at first contact in the session, it is probably best to wait until meeting the client for the first time to fully explain the concept so that the clinician can see the client's response and gauge the client's understanding (Kenny, 1998). However, there may also be times where it is appropriate to discuss such limitations over the phone. For example, if a new client became overly detailed about his or her struggles over the phone, it would behoove the clinician to make attempts to curtail such disclosures until confidentiality has been addressed sufficiently.

Confidentiality is such an important topic that state laws regulating the practice of psychologists typically have provisions about confidentiality and guidelines pertaining to the clinician–client relationship. In short, clinicians must maintain the privacy of their client's communications and records for effective evaluation and treatment to be possible. Caution must be exercised in releasing information to anyone but the client, and it is always best to err on the conservative side (Faust, 1998). If in doubt, do not release information without written consent from the client or court order. Several important factors that may impinge on confidentiality are discussed next.

1.2.1 Age

The age of consent to psychological evaluation or treatment varies among the states. Therefore, a 15-year-old adolescent seeking mental health services without parental or legal guardian consent may be able to do so legally in one state but not the other. In a state where it is legal to provide services to a 15-year-old without parental or guardian consent, all confidentiality laws of that state and professional ethical guidelines would apply. In other states, persons under the age of 18 would be considered minors, and no services could be rendered without parental or guardian consent. In such cases, the minor client should be informed of this requirement prior to the interview, and the client should also be made aware that his or her parents or guardians have a legal right to all records of evaluation and treatment (Turner et al., 2003).

1.2.2 Confidentiality of Records

Written records of psychological assessment and treatment are confidential documents. These records may not be released to any third party (including other professionals) without written consent from the client. For unlicensed professionals or students in training, the supervisor or clinical supervision team will be privy to the information, and the client should be duly informed of this. It is the responsibility of each professional to maintain up-to-date, detailed, and accurate records of treatment and to provide safeguards for such material. Given the number of people who could potentially access records (i.e., whomever the client releases the information to, third-party payers, those issuing court orders, legal guardians, etc.) it is prudent to take care when documenting in the record. It would be wise for clinicians to imagine that judges, attorneys, insurance company personnel, physicians, and the client him or herself are looking over their shoulder while documenting treatment (Faust, 1998). Alternatively, whereas one must be careful and prudent when documenting in charts, records should have enough detail to facilitate treatment planning and meet the requirements for reimbursement from third-party payers. Certain aspects of the clinical record (e.g., dates of sessions, diagnoses) may be released to a third-party payer for reimbursement. Maintaining adequate records is particularly important should the client transfer to another agency or clinician in the future. Although malpractice claims or lawsuits arising from interviews or treatments are relatively uncommon, an appropriately detailed record may also be important part of the clinician's defense.

The security of client records is the responsibility of the treating clinician. Written information should never be left unattended and should be filed promptly and properly when not being used. Written records should be kept in locked files with limited access. New challenges face those who are transitioning to the use of electronic media to store mental health-care information. This is an increasingly important issue, and the interested reader is referred to Gellman (2000) for a detailed review of how technologies may affect confidentiality and the delivery of mental health services. At a minimum, electronic records must be stored on a password protected computer in a locked office.

1.2.3 Duty to Warn and Protect

One of the limitations of confidentiality is the legal and ethical responsibility of mental health professionals to protect their clients and members of society from imminent danger.

Although clinicians are legally and ethically required to maintain confidentiality between themselves and their clients, clinicians also have an obligation to protect dangerous clients from themselves (i.e., suicide) and to protect potential victims from dangerous clients (i.e., homicide, child or elder neglect or abuse). This blurring of the responsibility of confidentiality occurred because of the landmark *Tarasoff vs. Regents of University of California* case in 1976. In this landmark case, the California Supreme Court required clinicians to take steps to protect individuals who are potential victims of their clients. Therefore, should a client inform a clinician that he or she has a specific and imminent homicidal plan with an identified potential victim, the following actions may need to be taken: the clinician has a duty to warn an intended victim, the clinician may need to commit the client to a psychiatric facility, and the clinician may need to notify the police about the client's plan (Faust, 1998). Consultation with supervisors or professional colleagues is clearly advised during these types of situations to think through the necessary steps one must take to protect clients and members of society. Further guidance about the duty to warn and protect is provided by Werth, Welfel, and Benjamin (2009).

1.2.4 Managing the Temptation to Discuss Cases

Information gathered from clinical interviews should not be the topic of casual conversation under any circumstances. Even anecdotal de-identified information can be highly identifiable if the situation is distinct. Describing a client during the course of a conversation with professional colleagues in what may seem to be a private setting may actually include unintended listeners who can identify the client's information due to the distinguishing features of the story. Novice clinicians may be more prone to discussing aspects of therapeutic experiences with peers in inappropriate settings (e.g., restaurants, lounges, etc.). They may also be compelled to discuss clients in areas of the treatment setting where other listeners may be present (e.g., at the front desk, elevators, hallways). Remember that confidentiality is the rule for information gathered in a clinical interview and not the exception and that respect for confidentiality is one of the important elements in forging an open and honest dialogue. Violation of the client's confidentiality without just cause is a serious offense, both legally and ethically, so great caution is always advised.

The issue of confidentiality is serious and complex with many potential ramifications. It can be tricky to navigate and must be handled with care. One simple rule of thumb is to avoid saying anything to anyone about the client that the clinician would be uncomfortable saying to them in front of the client, the client's attorney, and the clinician's supervisor. The intent of this section was simply to alert the clinician to the primary issues. For more complete coverage on confidentiality, the reader is referred to Bersoff (2008), Levin, Furlong, and O'Neil (2003), Knapp and VandeCreek (2006), and the Ethical Principles of Psychologists and Code of Conduct (APA, 2002).

1.3 Interviewing Basics

In this section, we provide a broad overview of some of the foundational concepts and skills that impact the clinical interview.

1.3.1 Establishing Rapport

Establishing rapport refers to creating an open, trusting, and safe relationship with the client. Of course, this is easier said than done, but establishing a therapeutic alliance with the client is an important requisite for effective interviewing and ongoing psychotherapy. Indeed, for clients to participate in psychotherapy, it is vital that they feel at ease with the clinician as they discuss the most intimate and personal struggles they are facing. Remember that, initially, many clients do not know what to expect from psychotherapy or from the clinician. Clients are faced with the task of being expected to reveal private and emotionally sensitive information to a veritable stranger! As such, they may be apprehensive, embarrassed, or downright terrified at the beginning of the first interview. Some clients find it difficult to ask for help because of the stigma associated with mental illness and psychotherapy. Others may have been in psychotherapy before but did not find it useful and therefore are cautious and skeptical of what the clinician can offer.

Faced with these challenges, the role of the clinician is to convey to the client an appreciation of their feelings and a willingness to listen without judgment to whatever the client may present. If the clinician keeps in mind that the client must be permitted time and patience for the establishment of trust, favorable results are likely to follow (Johnston, Van Hasselt, & Hersen, 1998). As important to the establishment of trust is the client's belief that the psychotherapy will provide new perspectives, change, and the possibility for growth. If the clinician can demonstrate this hope, clients will likely experience the freedom and security to explore their problems. The course of establishing an effective client–clinician relationship will be varied but an overarching goal of the clinician is to establish a trusting and respectful alliance with the client.

1.3.2 Being Empathic

A fundamental skill for any clinician is the ability to empathize with another person's experiences and convey such empathy through validation and understanding. Empathy is the ability to perceive and understand a client's feelings "as if" the clinician were experiencing them and to communicate that accurate understanding to the client (Faust, 1998). Always keep in mind that no two clients are the same and the clinician should be attuned to the subtleties of the client's feelings, experiences, and behaviors.

A distinction to be made is that empathy is understanding, not sympathy. By responding empathically, the client knows that the clinician is accepting, understanding, and joining his or her “world” without judgment, rather than just “feeling bad” for the client (Johnston et al., 1998). This empathic understanding enhances trust and increases the likelihood that the client will reveal intimate details of his or life, possibly details that the client has never previously revealed to anyone.

Empathy can be conveyed in many ways (e.g., nonverbal behaviors, such as listening attentively, nodding, showing a concerned facial expression; verbal communications of understanding and support) allowing the clinician to choose a style that is most comfortable for him or her. It is hard to do any of these things while taking notes, so keep note-taking to a minimum. Other important strategies for conveying empathy and validation include tone of voice, time and rate of comments and questions, and the area of questioning. When used correctly, these latter, seemingly trivial, strategies can be critical in conveying warmth and understanding.

1.3.3 Using Reflection

Reflection statements address what the client has communicated (verbally or nonverbally) and are typically used to highlight a specific point. A reflection statement, however brief, usually marks a specific feeling or point of information, and thus can be divided into *reflection of feelings* or *reflection of content*. Liberal use of both, throughout clinical interviews, is advised. Indeed, reflection is an important tool for any interviewer. When a clinician reflects a client’s feelings or the content of what a client is saying, or both simultaneously, this accomplishes two important tasks. First, it conveys a sense of empathy to the client by sending a message that the client is accurately understood, which strengthens the therapeutic bond. Second, it provides a mirror image for the client of what they are feeling and saying. This “clinician mirror” is an invaluable method for the client to learn about him or herself (Johnston et al., 1998). Reflection is a skill that assists clients to monitor and identify different feeling states and also to express those states in a healthy way.

Mastery of this skill does not mean that the clinician mimes or mimics the responses of the client. Reflection of feeling can be delivered in a simple phrase, such as “Sounds like you are feeling...,” “You must be feeling...,” or “I hear that you are feeling....” Reflection of content means that the clinician accurately paraphrases or summarizes the client’s statements, reflecting the “essence” of what the client communicated but not using the exact words or phrases. Think of this skill as helping the client in “getting to the heart of the matter” (Johnston et al., 1998). In summary, reflective statements can aid in the development of rapport as clients perceive that they are being truly and deeply understood. In turn, the client may relay more information that further strengthen the bond and ultimately assists the clinician in determining appropriate interventions.

1.3.4 Paying Attention to Language and Avoiding Jargon

An integral part of a successful interview is the communication between clinician and client. To arrive at an accurate diagnostic picture, the clinician must communicate to the client what is being asked of him or her. The clarity and comprehensibility of the questions will facilitate identification of pertinent information while enhancing rapport and trust in the client–clinician relationship (Faust, 1998). A common mistake that new clinicians sometimes make is their use of jargon or nonfamiliar vocabulary. The clinician's use of vocabulary heavy in psychological terminology often hinders effective communication. For example, a graduate student asked her new client, "What kind of boundaries do you have with your mother?" The term *boundaries* may mean something completely different to the client than it does to the clinician. In this example, the student clinician risks her client answering without a clear understanding of what is being asked and possibly hindering development of an accurate case formulation. Similar risks are possible with respect to unfamiliar language. A client's level of education, intelligence, background, and geographical location should be taken into account during any interview (Faust, 1998). This does not mean that the clinician should "talk down to" the client in any way. It does mean that words should be chosen with consideration.

1.3.5 Using Humor

The image of the stoic, impersonal, unflappable, and humorless clinician who is devoid of feelings is an outdated one. Certainly, being able to see the humorous elements even in the most challenging situations in one's life can be an adaptive coping strategy for clinicians and clients alike. In the interview setting, humor has the potential to "take the edge" off a discussion of particularly painful material and can serve to release physical tension. Smiling or even laughing together can be a source of bonding between clinician and client. These positive aspects of humor notwithstanding, some judicious caution in the use of humor is advised. For the clinician, the use of jokes or humor should be done sparingly and with caution before a therapeutic relationship is solidly formed. Although the intention of the clinician may be to lighten the mood, a humorous remark is typically not appropriate during the course of an initial clinical evaluation. When clients show the pattern of habitually using humor, sarcasm, or jokes as a way to distance themselves from feelings that are too painful or scary, the clinicians' reaction should be dependent on the context of the situation. At times, the clinician may choose to offer a gentle interpretative statement, such as "I have noticed that when you start to experience or discuss very painful feelings, you sometimes seem to make a joke to get away from those feelings. Have you noticed this in yourself?" Like all interventions and tactics, humor has its place in the clinical interview, especially if it is timed correctly and not overused. Regardless of when humor is used, it is most imperative that clinicians *laugh with clients* and not at them or their predicaments.

1.3.6 Responding to Questions from Clients and Managing Self-Disclosure

How one responds to questions from clients depends on the clinician's level of training and the types of questions being asked. In the early stages of training, beginning clinicians should generally be cautious about offering diagnostic or disposition information without first discussing the topic in supervision. For example, if during an interview a client asks "Do you think I have schizophrenia?" the clinician should address the client's feelings that are associated with the label, but delay answering the question directly until after a consultation with the supervisor has occurred. Questions of a pragmatic nature, for example about agency policies, should be answered directly (e.g., questions about billing, payment, or times the clinic is open).

Some clients ask clinicians to reveal personal information which can be a difficult situation to navigate. Should clinicians self-disclose and if so, what kind of details and how much should they reveal? Whereas clinicians have highly divergent opinions on the potential costs and benefits of self-disclosure, an occasional sharing of personal information can facilitate the interview and enhance rapport (Knox & Hill, 2003). However, like the use of humor, self-disclosure must be timed appropriately and used limitedly, and perhaps most important, the "shadow side" of self-disclosure must be carefully considered.

One negative impact of revealing personal details is that it frequently switches the focus of the interview from the client (where it rightfully should be) to the clinician. In some cases, clients prod clinicians for self-disclosures to test the limits of the psychotherapy relationship. Therefore, clinicians must always ask themselves about the intent and impact the disclosure could have on the client's progress toward his or her identified goals. An inappropriate disclosure can also burden the client. As such, beginning clinicians should generally keep self-disclosure to a minimum. One rule of thumb is to freely disclose details one would not mind seeing printed in the local newspaper, such as one's age, level of training and education, and the name of one's supervisor. Clinicians should be cautious about disclosing details of a more personal nature. When a personal disclosure is made, the clinician should be able to articulate to the supervisor the reason why the disclosure was made including the goal the clinician was trying to accomplish specifically by the disclosure. Clinicians should also ask themselves "Could the goal have been accomplished in another fashion that does not carry the risks associated with self-disclosure?" If not, another general rule of thumb is to disclose feelings rather than facts: "I know what it feels like to be hurt by somebody I trusted" rather than "I also felt hurt when my ex-spouse cheated on me." Should clients press for a self-disclosure (e.g., "Have you ever been raped?"), it is advisable to reflect the client's curiosity and try to understand what is behind the question, to illuminate the client's assumptions or concerns about the clinician. It also helps to refocus the discussion back to the client. Under no circumstances is it appropriate for the clinician to self-disclose about any current personal problems.

1.4 Diversity and the Interviewing Process

Culture refers to a common sense of beliefs, norms, and values among a group of people. Culture impacts whether individuals seek help, what type of help they seek, what types of coping styles and social support are available, and how much stigma is attached to mental illness (US Department of Health and Human Services (DHHS), 2001). The main purposes of a diagnostic interview are to establish a therapeutic relationship with the client and to begin to formulate a clinical diagnosis. Failing to consider issues of diversity can negatively impact both the relationship and the diagnosis, which can ultimately reduce the effectiveness of psychotherapy. Diversity, as it is discussed here, includes all aspects of cultural identity such as age, gender, geographic location, physical ability, race and ethnicity, religious preference, sexual orientation, and socioeconomic status. Consideration of cultural issues is particularly important given the increasing diversity of the United States and the likelihood of clinicians encountering clients from cultural backgrounds different from their own, sometimes markedly so. Three major domains of cultural competence are (1) awareness of one's own assumptions, values, and biases, (2) understanding the worldview of culturally diverse clients, and (3) knowledge of culturally appropriate intervention strategies and techniques (Sue & Sue, 2008). Next, we briefly touch upon each of these domains with the caveat that this section provides a general overview of the issues and therefore is not intended to provide the necessary background material for clinicians to adequately assess clients from different cultural groups.

1.4.1 Impact of Diversity on the Therapeutic Relationship

As we have highlighted earlier, a good working alliance is crucial for psychotherapy to be effective. Particularly during the first few sessions, clinicians must create good rapport and establish their credibility in a way that is sensitive to the client's culture. Dana (2002) describes a process by which African-American clients may "size up" a mental health clinician, and suggests that African Americans look for signs of genuineness, authenticity, and approachability in mental health clinicians. Individuals from other racial or ethnic groups may find it important to maintain formality with professional helpers. The clinical and diagnostic interview is often a client's first experience with the mental health-care system; therefore, it may be necessary to spend time during the interview exploring the client's expectations regarding psychotherapy. For instance, different meanings for the term *clinician* can be found across different cultural groups, ranging from physician, to medicine man/woman, to folk healer (Paniagua, 2005). Understanding the client's definition of clinician will enhance the clinician's ability to help the client manage his or her problem.

The field of psychology can function as a culture since it provides a lens for viewing the world. Clinicians must be aware of the assumptions and biases of diagnosis and treatment in the practice of traditional psychology. Sue and Sue (2008) describe several culture-bound values of psychology including: focus on the individual; preference for verbal, emotional, behavioral expressiveness; insight; self-disclosure; scientific empiricism; distinctions between mental and physical functioning; ambiguity; and patterns of communication. Nonverbal communication, such as bodily movements (e.g., eye contact, facial expression, posture), the use and perception of personal and interpersonal space, and vocal cues (e.g., loudness of voice, pauses, rate, inflection) can vary depending on cultural factors (Sue & Sue, 2008). Clinicians should be aware of their own communication style and anticipate how it may affect clients with a different communication style. To facilitate rapport with clients of a different culture, it may be helpful for clinicians to match the client's rhythm and pace of speech, maximize awareness of their comfort level with eye contact and physical distance, show respect for hierarchy in the family and extended family, and use appropriate metaphors and symbols (Ingram, 2006).

Adjustments can be made to the interview that may help to increase the comfort level of the client and serve to strengthen the therapeutic relationship. For example, clients with a visual impairment may require large print questionnaires and informed consent forms. Alternatively, the clinician could offer to read printed materials aloud. Hearing amplifiers can be offered to those clients with a hearing impairment. Interpreters can be used when the clinician and client do not share the same language. An interpreter can help to facilitate a client's sense of belonging at the treatment site, as well as increase client trust in the clinician and the psychotherapeutic process (Paone & Malott, 2008). Professional interpreters should have training in mental health. Due to privacy and confidentiality concerns, use of a client's family member as an interpreter for psychotherapy is generally not recommended (Paone & Malott, 2008; Sue & Sue, 2008).

Modifications in the diagnostic interview may also include clinicians being more flexible in their role and shifting the traditional boundaries of "clinician." For example, for a client who has difficulty getting to the mental health clinic because of lack of transportation, the clinician may conduct the interview outside of the office, such as in the client's home or another convenient location. Having a more active style by offering concrete advice and assistance may be necessary, such as providing information on obtaining social services if they are needed by the client. Consulting family members and paraprofessionals or folk healers may be appropriate in some cases in order to better understand the struggles of culturally diverse clients (Paniagua, 2005). It is important to determine external factors related to the presenting problem for clients who have suffered from discrimination such as racism and sexism, in some cases for many years. Finally, assessing the positive assets of culturally diverse clients, such as family, community resources, and religious organizations is essential as well.

1.4.2 Impact of Diversity on Clinical Diagnosis

Clinicians must be sensitive to cultural issues not only to more effectively establish a therapeutic relationship, but also because of the impact of diversity on clinical diagnosis.

An accurate diagnosis is essential, as it facilitates communication, dictates the nature of treatment, and provides an indication of the likely prognosis and course of the disorder (Segal & Coolidge, 2001). During the clinical interview, clinicians use the client's description of the frequency, intensity, and duration of the symptoms; signs from a mental status examination; and the clinician's own observations and judgment of the client's behavior to determine a formal diagnosis of a mental disorder. The final diagnosis depends on the clinician's belief about whether the client's signs, symptom patterns, and impairment of functioning meet criteria for a given diagnosis, as set forth by the American Psychiatric Association (APA, 2000) in the *Diagnostic and Statistical Manual of Mental Disorders*.

Although the symptoms of mental disorders are found worldwide, diagnosis can be challenging because the manifestations of mental disorders vary with age, gender, race, ethnicity, and culture (DHHS, 2001). Culture can account for variation in the ways in which clients communicate their symptoms, which symptoms they report, and the meanings they attach to mental illness. Clinicians who are unfamiliar with a client's frame of reference may incorrectly diagnose as psychopathology variations in behavior, belief, or experience that are particular to and normative within the client's culture. For example, speaking in tongues, hearing the voice of God, or witnessing spiritual beings should probably not be considered pathological for individuals from certain religious communities, whereas it may be considered a problem from someone who is nonreligious (Johnson & Friedman, 2008). Some have suggested that the use of structured and semi-structured interviews can reduce clinician bias with regard to diagnosis (Aklin & Turner, 2006).

The most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV-TR*; APA, 2000) provides an outline designed to assist clinicians with developing a culturally appropriate clinical formulation. Clinicians are encouraged to explore and provide a narrative summary for each of five categories, which include:

1. Cultural identity of the client: ethnic or cultural reference groups, degree of involvement with both culture of origin and host culture, language abilities, use, and preference.
2. Cultural explanations of the client's illness: predominant idioms of distress, meaning and perceived severity of symptoms in relation to norms of cultural group, local illness category used to identify the condition, perceived causes of the illness, preference for and past experience with sources of care.
3. Cultural factors related to psychosocial environment and levels of functioning: culturally relevant interpretations of social stressors, available social supports, levels of functioning and disability.
4. Cultural elements of the relationship between the client and the clinician: differences in culture and social status between the client and the clinician and the problems that these differences may cause in diagnosis and treatment.
5. Overall cultural assessment for diagnosis and care: discussion of how cultural considerations influence diagnosis and care.

The guidelines are meant to “supplement the multiaxial diagnostic assessment and to address difficulties that may be encountered in applying DSM-IV criteria in a multicultural environment” (APA, 2000, p. 897). The DSM-IV-TR also provides a glossary of 30 culture-bound syndromes, which are “localized, folk, diagnostic categories” generally limited to specific societies or cultures and may or may not be linked to a specific diagnostic category (APA, 2000, p. 898). Becoming familiar with the categories listed in the glossary can assist clinicians with recognizing culture-specific conditions that may be apparent in an intake interview and integrated into a diagnostic formulation.

Appraisal of client’s cultural background should be a standard part of any clinical or diagnostic interview. However, a word of caution with regard to issues of diversity: “Although it is critical for clinicians to have a basic understanding of the generic characteristics of counseling and psychotherapy and the culture-specific life values of different groups, overgeneralizing and stereotyping are ever-present dangers” (Sue & Sue, 2008, p. 154). While generalizations are guidelines for behaviors, they should be tentatively applied in new situations and open to change and challenge (Sue & Sue, 2008). In addition, because each person has multiple identity dimensions, clinicians should be cognizant of the many within-group differences that can exist between members of a cultural group, which can sometimes outnumber the between-group differences. For example, differences between individuals considered to be in the same racial or ethnic group can be due to any number of factors, such as varying national origin, socioeconomic class, level of acculturation, age, or gender, to name a few. Moreover, clinicians should not automatically assume that the problems of culturally diverse clients are necessarily related to cultural experiences or background. For example, it would be erroneous to assume that an 85-year old-client is depressed because of age alone.

Readers are encouraged to consult a number of sources that cover issues of diversity more comprehensively: DHHS (2001); Paniagua (2005); Pedersen, Draguns, Lonner, and Trimble (2008); and Sue and Sue (2008).

1.5 Issues Specific to Emerging Professionals

The process of learning how to conduct a comprehensive clinical interview can be exciting, but also anxiety provoking. Many emerging professionals feel overwhelmed by the task and lack confidence in their knowledge and skills. Conducting an effective interview is a skill that can only be developed over time and, in the beginning, errors are likely to be made. In fact, struggling with one’s first several interviews is to be expected and therefore should not be a source of undue anxiety for the emerging professional. Common issues specific to emerging professionals in the context of clinical interviewing include managing anxiety, obtaining the appropriate breadth and depth of information, overlooking the process (i.e., the interaction between client and clinician) of the interview, premature advice-giving, interacting with clients with diverse characteristics, and handling personal questions.

Clients can often sense a clinician's anxiety or lack of control; therefore, it is essential for emerging professionals to learn to manage their nervousness during interviews. Frequently, clients are anxious at the interview as well and might not know what to expect, depending on whether or not they have had previous experience with psychotherapy. It can be helpful to ease into the initial interview by engaging the client in small talk before delving into the client's concerns. Emerging professionals can reduce their own anxiety regarding interviews by activities such as observing more experienced clinicians conduct diagnostic interviews, practicing mock diagnostic interviews with peers, and reviewing ahead of time any information gathered about the client and the client's pressing concerns. In addition, the beginning of one's career is a good time to learn to engage in adequate self-care. Regular exercise, a sufficient amount of sleep, and use of relaxation exercises and meditation are all ways of maintaining an overall sense of well-being and control, which will likely have a positive impact on one's level of professional confidence.

Emerging professionals tend to worry about getting "all" of the necessary information in the initial interview and struggle with asking too many superfluous questions (Faust, 1998). This can make the interview feel like an interrogation rather than a conversation between the clinician and client. However, in a sense, the entire course of psychotherapy with a client can be thought of as an "intake" process. Clinicians continue to learn more about the client as the psychotherapy progresses so, whereas it is important to obtain as much relevant information as possible, getting all of the information in one or two interviews is not necessarily a requirement. On the other hand, emerging professionals may struggle with not exploring sensitive areas out of the belief that it is impolite to explore certain aspects of clients' lives (Faust, 1998). Avoidance of socially sensitive topics has the potential for communicating to the client that certain areas are "off-limits" and should not be explored in psychotherapy. For example, young clinicians may be hesitant to discuss sexuality with an older client, even when it is central to the presenting problem. In addition, avoiding sensitive topics in an interview could be life-threatening if a client has suicidal or homicidal ideation or is dealing with domestic violence or substance abuse.

Some emerging professionals focus so much on the *content* of the interview that they end up overlooking the *process* of the interview. Many clinics use interview outlines or checklists to assist emerging professionals with obtaining relevant information. However, this can lead to an excessive amount of note-taking in an attempt to make sure every blank on the intake form is filled in. This may give the impression to clients that the clinician is more interested in filling out paperwork than getting to know them as individuals, which can negatively impact the development of rapport. If diagnostic interviews are audio- or video-taped for the purpose of supervision, clinicians can use those to ensure no vital information was overlooked. Emerging professionals may become frustrated if there are significant gaps in the information obtained during a diagnostic interview, in spite of repeated attempts to get pertinent answers. Difficulty with obtaining information from a client is often important diagnostically. For example, it could reflect the client's ambivalence about psychotherapy, personality style, cognitive impairment, or a poor therapeutic alliance. It is often useful to address this difficulty directly by checking in with the client about how he or she is feeling about the interview, about the clinician, and about disclosing personal information.

Many emerging professionals struggle with the impulse to “fix” the client (Ingram, 2006). At times it may be necessary to take action during an interview, for example, to ensure the safety of a suicidal client or assist a low-income client with obtaining financial assistance for basic needs such as food or electricity. However, advice-giving often evolves from the interviewer’s experiences and perspective, rather than the client’s (Faust, 1998). Some clinicians feel a sense of pressure to “do something” to demonstrate their competence to a client early in the interview or treatment process and may be tempted to offer simple advice. We encourage clinicians to resist this temptation and discuss it in supervision. Often clients enter psychotherapy only when they have tried every other solution to address their problems and none of those solutions have been effective. It is likely that the clinician who gives advice without adequate exploration will make suggestions that have already been tried, adding to a sense of hopelessness and frustration on the part of the client and undermining the client’s confidence in the clinician’s abilities. Simple solutions for complex problems simply do not work! Emerging clinicians can assure themselves that providing empathic listening and emotional support for the client are active strategies that are known to be beneficial.

Some emerging professionals are uncomfortable interacting with clients from diverse backgrounds, and one’s level of comfort with diverse characteristics will determine how issues of diversity are handled (Faust, 1998). Consultations with supervisors and peers who are more knowledgeable about issues of diversity as well as attending workshops and continuing education programs can better equip clinicians to work with diverse populations (DHHS, 2001). In addition, clinicians should constantly strive to be aware of their own biases and stereotypes to ensure they are not impacting the interview process or impairing the therapeutic relationship. Clinical supervision and the clinician’s personal psychotherapy are appropriate environments in which to explore one’s own biases, stereotypes, and areas of discomfort. Clinicians should be willing to do extra research after meeting with a new client if there is a knowledge deficit in a particular area. If a clinician determines that he or she is not competent to work with a specific client, that client should be referred to another clinician who is.

Dealing with personal questions such as the clinician’s age, ethnic background, marital status, or whether or not the clinician has children can be especially difficult for emerging professionals. There are several reasons for why a client might ask a clinician a personal question. Sometimes clients who ask personal questions are looking for a way to “bond” or become more comfortable with the clinician by seeking common ground, for instance, by asking where the clinician grew up. Alternatively, clients may be unaware of the unique nature of clinician–client relationships and how this professional relationship is different from relationships with family or friends. Other times, clients are unsure whether the clinician has the expertise or life experience to adequately understand their struggles and assist them with finding solutions to those struggles. For example, an older client might ask about the clinician’s age because the clinician seems “too young” to be helpful. As we noted earlier, answering these types of factual questions in a nondefensive way that reassures the client of one's professional competence can lessen the client's concerns. It may also be useful to discuss with the client the reason behind the question. Exploring the client's concerns can facilitate the therapeutic alliance as well as provide further diagnostic information.

1.6 Clinical Interviewing Dos and Don'ts

Although there is great flexibility in the ways clinicians conduct the clinical or diagnostic interview, we gently offer the following guidance regarding some positive strategies clinicians may endorse and some tactics they may wish to avoid. Beginning with the "dos" of the interview, do focus as much on developing rapport as on gathering data. Whereas the two primary goals of the clinical interview are to develop a working alliance with the client and to gather relevant data about the personal background of the client and the types of problems he or she is experiencing, the first goal of establishing rapport is arguably the most important of the two. Indeed, without the development and ongoing nurturance of a positive therapeutic relationship, the act of gathering information about the client is pointless if he or she does not return for ongoing treatment (Hook et al., 2010).

Do provide structure and direction in the interview as needed (Segal, Maxfield, & Coolidge, 2008). Whereas advantages of a nonstructured clinical interview include its flexibility, which allows for discussion and exploration of topics that may not necessarily be covered by a structured interview, and its provision of extensive opportunities for empathizing with the client and developing a strong therapeutic alliance, a potential hazard is that the interview may stray excessively. A general rule of thumb is that if clients provide appropriate structure to the interview (moving appropriately from topic to topic), then no active structuring is required by the clinician. However, if clients struggle with providing their own structure (e.g., spending too much time on topics of little or questionable relevance to the problems at hand), then the clinician must provide more guidance. Along these lines, do have a solid knowledge of the symptoms and requirements for diagnosing a wide range of disorders from the *DSM-IV-TR* to be able to assess for the full range of cardinal and associated symptoms as part of the diagnostic process. This knowledge will also be of help when crafting case conceptualizations and treatment plans.

Do pay special attention to the final moments of the initial interview (Segal et al., 2008). There is a lot to accomplish during the first interview, and this includes the last 5–10 min as well. Rather than end abruptly, the clinician should attend to the sensitive information that has been shared and may want to thank the client for sharing personal, potentially upsetting experiences. The ending of the interview is also an opportunity to review important themes addressed and, as a means for offering a sense of hope, clinicians can suggest some of the ways that psychotherapy could be helpful in addressing the presenting complaints.

Conversely, there are a number of things to avoid during the interviewing process. Don't become overly committed to an initial diagnostic hypothesis, instead maintain multiple hypotheses (Segal et al., 2008). Although knowledge of a previous diagnosis and initial impressions of the client are useful, it is important to keep an open mind. If clinicians are not flexible in diagnosing, they may be closed off or dismissing of information that does not align with that first hypothesis. Maintaining multiple hypotheses is essential in making accurate diagnoses and subsequently providing an effective treatment.

Don't make assumptions (Segal et al., 2008). It is tempting to believe that we understand the client's symptoms when they use labels. For example, when someone says that they have been experiencing "panic attacks," it is easy to imagine increased heart rate, sweating, and the intense fear that he or she is going to die or have a heart attack. As another example, when someone says that they are "codependent" it likely conjures an image of a person who exhibits overdependence on people, behaviors, or things, such as a spouse who supports addiction by excusing, denying, or concealing evidence of the partner's alcohol abuse. At first blush, these labels seem reasonable. However, without specific inquiry and the gathering of specific examples of behaviors, it is unclear that the clinician and client define the problem or symptoms in the exact same way. It is possible in fact that the clinician and client are thinking of quite different experiences, making appropriate and effective treatment unlikely.

Finally, it is important that clinicians do not let their opinions or values unduly factor into the interview (Segal et al., 2008). There will be instances in which the clinician feels at odds with the client's decisions and behaviors; however, with the exception of illegal and harmful actions, it is important to provide an environment for the client that is free of the clinician's biases and values. This is especially challenging if the client has done things the clinician feels are reprehensible or disgusting. In these cases, it can be helpful to try to understand and empathize with a person who has done awful things rather then with an awful client, so try to conceptualize the person as not equivalent to their behavior.

In order to feel comfortable sharing such personal information with a stranger, the client must feel safe, rather than conscious of the topics that make the clinician uncomfortable or are of particular interest to the clinician. Unfortunately, one's biases and judgments are not always conscious, so special attention must be paid to one's reactions to the content of interviews and psychotherapy sessions. In the event that a clinician's opposition to the client's behaviors, values, or decisions is intense, the clinician should discuss the issue with a colleague or supervisor, and if the feelings continue to intrude into the treatment, the clinician should refer the client elsewhere if ongoing psychotherapy is needed.

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Chapter 2
Interviewing Strategies, Rapport, and Empathy

Catherine Miller

2.1 Introduction

The two main tasks of a clinician are to accurately assess client symptoms and then to effectively treat these symptoms. What ties these two tasks together is the clinical diagnosis. Diagnosis has been defined as the "identification and labeling of a psychiatric disorder by examination and analysis" (Segal, Maxfield, & Coolidge, 2008, p. 371). It is essential that clinicians arrive at a reliable and valid diagnosis to successfully treat the disorder and ameliorate client distress. In order to do this, clinicians must be able to effectively interview clients. Effective interviewing involves both technical knowledge, such as what subject areas to cover, and interpersonal skills, such as the ability to create rapport and respond empathically with clients. This chapter will address both areas. Technical knowledge will be addressed by reviewing the main diagnostic interviewing strategies that have been utilized in the field, whereas interpersonal skills will be addressed by reviewing the extant literature on empathy and rapport.

2.2 Technical Skills

Despite the proliferation of self-report instruments, questionnaires, and other testing devices utilized in clinical psychology for diagnostic purposes, "the face-to-face verbal dialogue between assessor and client is the prototypical format for most clinical enterprises" (Loney & Frick, 2003, p. 235). It remains the most common method to evaluate and diagnose individuals (Rogers, 1995; Segal & Coolidge, 2007). The term clinical interview is a broad one, including interview formats that vary in terms of subjects addressed, length of time to complete, and degree of

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interviewer structure imposed. Clinical interviews can be broadly divided into two categories: unstructured and structured approaches. Each category will be reviewed, including the main advantages and disadvantages of each interviewing format. Examples of three common structured approaches will also be presented.

2.2.1 Unstructured Approaches to Interviewing

Unstructured approaches to interviewing allow clinicians to formulate their own questions depending on a client's issues and concerns. In addition, unstructured approaches allow clinicians to record client responses in idiosyncratic ways (Rogers, 1995). Utilizing such formats, it is the clinician who is "entirely responsible for determining what questions to ask and how the resulting information is to be used in arriving at a diagnosis" (Summerfeldt & Antony, 2002, p. 3). This lack of uniformity or standardization requires the clinician to rely on client presentation, clinical intuition, theoretical model, knowledge base, view of psychopathology, and interpersonal style to guide the interview process (Segal & Coolidge, 2007).

The primary advantage of the unstructured approach lies in the flexibility of such a format. Unstructured interviews are "highly dependent on the specific interviewer, the specific interviewee, the type of interview, and the conditions under which the interview took place" (Sattler, 1992, p. 463). This approach allows the clinician to have maximum latitude and flexibility regarding what questions to ask, how to probe symptom patterns, and how much time to spend on different subject matters, resulting in a rich amount of clinical information and a deep understanding of the unique make-up of a client (Segal et al., 2008). Such flexibility is thought to greatly aid in establishing rapport with the client, as the client's main concerns are the focus of the interview and little time is spent in questioning other areas or symptoms (Mash & Terdel, 1997; Sattler, 1992).

The flexibility that is the hallmark of unstructured approaches carries with it a cost: reduced reliability and validity (Rogers, 2001). There are an infinite variety of ways an interview may be conducted, depending upon the client's presentation and the clinician's interests. Ten clinicians may interview the same client and end up with ten different diagnostic pictures, based on the types of questions they chose to ask. Not having an accurate diagnosis may hinder the effective treatment of the client, and also poses a public relations problem for psychology as a field. If we cannot agree on a diagnosis, how can we present ourselves to the public as competent and effective mental health providers?

Research has clearly shown that clinicians with similar training in similar working environments are often unable to agree about an individual's diagnosis (Angold & Fisher, 1999). Why this is such a common phenomenon is likely due to the variability inherent in diagnostic interviews. Within an interview, two main sources of variability have been identified: criterion variance and information variance (Ward, Beck, Mendelson, Mock, & Erbaugh, 1962). Criterion variance may be defined as "variations among clinicians in applying standards for what is clinically relevant … and when the diagnostic criteria are met" (Rogers, 2001, p. 5). Nosological systems such as the current version of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association, 2000), which contain explicit diagnostic criteria and a multiaxial system, have substantially reduced criterion variance but have not eliminated the problem (Lesser, 1997; Rogers, 1995). For example, Blashfield (1992, as cited in Rogers, 1995) found that clinicians using unstructured interview methods still do not systematically apply diagnostic criteria, resulting in misdiagnosis 60% of the time.

Information variance may be defined as "variations among clinicians in what questions are asked, which observations are made, and how the resulting information is organized" (Rogers, 2001, p. 5). For example, clinicians may ask questions in unique ways that may be understood in different ways by different clients. In addition, clinicians are subject to confirmatory bias. In other words, clinicians tend to form a diagnostic hypothesis before they have collected all the relevant data and then seek information selectively to confirm that hypothesis, ignoring any disconfirming evidence and missing important symptoms (Angold & Fisher, 1999; Rogers, 2001). Finally, clinicians tend to stop the interview process after the first mental disorder is established, so that many diagnoses are missed, particularly disorders that are rare (Rogers, 2001). All of these variations among interviewers leads to different amounts and type of information being collected; this naturally results in different diagnostic formulations (Lesser, 1997).

In a classic study, Ward et al. (1962) argued that the majority of diagnostic discrepancies between clinicians arise from criterion and information variance, not from true differences in client symptom presentation. Ward et al. reported that 62.5% of variability in responding results from criterion variance, 32.5% results from information variance, and only 5.0% is the result of true changes in a client's clinical presentation. In other words, how the interview is conducted (information variance) and how the criteria are utilized to score responses (criterion variance) greatly affect the results.

Such findings led to dissatisfaction with traditional unstructured approaches to interviewing. To reduce information variance, researchers discarded the unstructured approach to interviewing, instead developing structured interview formats that required interviewers to ask the same questions of all clients (Lesser, 1997).

2.2.2 Structured Approaches to Interviewing

Within the past three decades, structured approaches have been developed that have systematized the interview process (Rogers, 2001). These structured interviews were developed initially for use with adult clients in research settings, but their use has expanded to child/adolescent populations and to clinical settings (Loney & Frick, 2003). Structured interviews require clinicians to do two things: (a) ask questions and follow-up probes in a standardized manner and sequence, and (b) rate client responses using systematized ratings (Segal & Coolidge, 2007). Client responses are generally rated by clinicians in either a dichotomous yes/no format or by using a Likert-type scale that allows for symptom severity ratings. Interview questions typically start with a stem question and then follow-up with a series of questions designed to assess frequency, duration, and severity of the behavior of interest (Loney & Frick, 2003). Some of the structured interviews utilize a computer-assisted administration format, wherein the clinician reads each item and enters client responses. The computer scores responses along the way, allowing only appropriate follow-up questions to be presented (Loney & Frick, 2003).

There are several advantages of structured approaches over unstructured interview formats, including improvements in the assessment of psychometric properties, coverage of diagnostic categories, ratings of psychopathology, and administration of interviews. First and foremost, structured interviews are able to demonstrate good to excellent psychometric properties, something that was difficult to even assess with unstructured formats (Rogers, 1995). Second, there is more comprehensive coverage of diagnostic categories with structured interviews, including diagnoses that are less prevalent (Segal & Coolidge, 2007). Such a thorough diagnostic evaluation aids both clients and clinicians. Clients benefit from improved treatment planning whereas clinicians benefit from decreased risk of negligence or malpractice allegations (Hodges & Cools, 1990). Third, depending on the type of response allowed, structured interviews allow clinicians to rate gradations in severity of symptoms and level of impairment, rather than to merely note the presence or absence of symptoms (Rogers, 1995). Fourth, the routine wording and ordering of questions of structured formats greatly eases interview administration and, therefore, expense. Rather than highly trained professionals, lay interviewers or computerized administrations may be utilized for some of the more highly structured interview formats. The improved administration ease and reduced expense may allow thorough diagnostic interviews to be conducted in large settings where few clinicians traditionally are found, such as prisons, residential treatment centers, shelters, etc. (Shaffer, Fisher, & Lucas, 1999).

Although their advantages are convincing, structured interviews have several disadvantages. First, the rigid structure of the interview may interfere with relaxed communication. If clinicians become too tied to a rigid and inflexible protocol, there is a chance that clients may become disengaged from the diagnostic process (Rogers, 1995). Second, there is some evidence that clients report more symptoms early in the interview process, regardless of which symptoms are assessed first (Loney & Frick, 2003). The reasons for this are unclear, but two main hypotheses have been proposed. It may be that clients learn over time that endorsement of symptoms lengthens the interview process and so they begin to deny later symptoms. Alternatively, clients may become sensitized to the threshold for reporting issues by attending to the questions in the first part of the interview (Loney & Frick, 2003). Regardless of the reason, it is imperative that clinicians remain aware that clients may be endorsing more items in the beginning of the interview process and that this may be due to an artifact of the assessment method rather than a true picture of the client functioning. Third, as mentioned earlier, structured interviews specify precise wording of questions and generally do not allow for rephrasing of questions by interviewers. There is a risk that clients may misunderstand questions and then respond inappropriately (Shaffer et al., 1999). Fourth, interviews cannot cover every diagnosis and symptom presentation; if they did, they would be too long and cumbersome to be helpful. Therefore, they may not do an adequate job assessing atypical symptoms or diagnoses (Shaffer et al., 1999). Finally, these interviews are time-consuming to learn and to administer. Training in administration typically takes at least 1 week and often up to 4 weeks. Administration typically takes at least 75 min but may take up to 4 h with severely disturbed clients.

Most structured interview formats share some common features (Hodges & Cools, 1990; Loney & Frick, 2003; Rogers, 1995). First, these interviews are typically organized by disorder or syndrome, a system called symptom clustering. Although this organization necessarily entails repeated questioning of symptoms contained in several diagnoses, it is advantageous in that it allows clinicians to quickly rule out specific disorders and to allocate maximum time within the interview to those diagnoses that appear most likely (Summerfeldt & Antony, 2002). Second, structured interviews typically employ unidirectional scoring, meaning that endorsement of an item is a sign of psychopathology. Such a process allows for rapid scoring and diagnostic decision making. Finally, questions included in many structured interviews directly correspond to diagnostic criteria contained in the DSM or some other classification system, such as the Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1978). This direct correspondence clearly aids clinicians when attempting to diagnose clients based on interview responses. However, it may cause some problems, as these interviews must constantly be revised to keep up with changes in diagnostic classification systems (Angold & Fisher, 1999).

Despite common features, structured interviews vary considerably across three main dimensions, including diagnostic coverage, ease of use, and degree of structure (Rogers, 2001). First, structured interviews differ according to breadth and depth of focus, known in the literature as the bandwidth-fidelity issue (Widiger & Frances, 1987, as cited in Rogers, 2001). Due to time constraints, a single interview cannot simultaneously cover all diagnostic categories in considerable depth. Interviews with broad diagnostic coverage sacrifice depth in two ways: by screening out disorders and by minimizing the number of questions asked. In contrast, interviews with greater depth (i.e., more questions regarding each symptom) restrict coverage to common diagnoses. Second, structured interviews differ according to ease of use. As previously mentioned, interviews that closely follow DSM diagnostic criteria and that are organized around symptom clusters simplify administration and scoring (Rogers, 2001). Interviews that require considerable clinical judgment in question formulation and scoring are obviously much more difficult to use.

The main difference between the various structured interviews lies in the level of structure imposed on the clinician. There are two types of structured approaches: semistructured and highly structured interviews (Rogers, 2001). Highly structured interviews specify the exact wording, order, and coding of each question (Edelbrock & Costello, 1988). Questions must be read verbatim, with no variation or additions. In contrast, semistructured approaches provide only general and flexible guidelines for conducting the interview, allowing clinicians more latitude in pursuing alternative lines of inquiry (Edelbrock & Costello, 1988). Clinicians may even invent their own unstructured questions (Rogers, 1995), allowing semistructured interviews to appear more conversational than highly structured interviews (Edelstein & Berler, 1987). Semistructured formats have been referred to as interviewer-based interviews, as the clinician has some discretion in varying the wording and the ordering of questions (Angold & Fisher, 1999). In contrast, highly structured formats have been referred to as respondent-based interviews, as the client is required to interpret the meaning of the questions and decide on a reply with minimal or no assistance of the interviewer (Shaffer et al., 1999).

Deciding which format to utilize is dependent on type of setting and purpose of the interview. Because more clinical judgment is needed in the semistructured interviews, these can only be administered by experienced clinicians with advanced training. Because more diagnostic categories are typically sampled in fully structured interviews, these require more time to complete. Currently, semistructured and highly structured interviews are utilized in the following three arenas: research, clinical practice, and clinical training (Segal & Coolidge, 2007; Summerfeldt & Antony, 2002). Fully structured interviews are most commonly utilized in research settings, as this allows for direct comparisons across clinicians, settings, and diagnostic groups (Rogers, 1995, 2003). Such interviews are also utilized in clinical settings, where portions of fully structured interviews may be administered as part of a comprehensive intake (Segal & Coolidge, 2007). This is preceded or followed by an unstructured interview and administration of other measures in order to best meet the needs of both clinicians and clients (Loney & Frick, 2003; Rogers, 2003). Finally, semistructured and fully structured interviews have been utilized as part of clinical training of mental health professionals (Segal & Coolidge, 2007). Learning to administer such interviews greatly aids the budding clinician's understanding of diagnostic criteria and provides a thorough template for the clinician to use in developing his or her own style of unstructured interviewing (Loney & Frick, 2003).

This next portion of the chapter will briefly review three common structured interview formats so that clinicians may better evaluate their relative merits. These three were chosen as they are the most commonly utilized formats in clinical and research settings.

2.2.2.1 Highly Structured Interview Formats

Diagnostic Interview Schedule for DSM-IV

The *Diagnostic Interview Schedule for DSM-IV (DIS-IV)* for adults was the first highly structured diagnostic interview to be developed (Robins, Cottler, Bucholz, & Compton, 1995). It was designed in 1978 as a research instrument for the Epidemiological Catchment Area project, a large epidemiological study in the United States sponsored by the National Institutes of Mental Health (NIMH). The highly structured format of the DIS can be attributed to budgetary restrictions of the study. To minimize the high cost of experienced clinicians, the developers of the DIS utilized a highly structured approach which minimized clinical inference and judgment, allowing less costly lay persons to administer interviews (Rogers, 2001; Summerfeldt & Antony, 2002). Because it is a highly structured interview, the questions on the DIS must be read verbatim; the interviewer is not given the flexibility to invent his or her own questions (Rogers, 2001). Computerized administration (either self- or interviewer-administered) of the DIS-IV is recommended, so as to maximize standardization (Segal et al., 2008). All questions are closed-ended and replies are coded with a forced-choice yes/no format.

The DIS is a broad-based measure, designed to assess a wide range of both current and lifetime diagnoses (Summerfeldt & Antony, 2002). Originally, it was based on diagnostic criteria from the third revision of the DSM (DSM-III; American Psychiatric Association, 1980), and it has been revised several times to reflect updated DSM criteria. The current version corresponds to DSM-IV diagnostic criteria (American Psychiatric Association, 2000) and covers more than 30 Axis I diagnoses and 1 Axis II diagnosis (antisocial personality disorder) (Rogers, 2001). Although primarily designed as an adult instrument, DIS-IV covers several disorders that originate in childhood, including attention deficit hyperactivity disorder (ADHD), separation anxiety disorder, oppositional defiant disorder, and conduct disorder (Rogers, 2001). Due to time and length restrictions, several diagnoses are not covered, including most somatoform disorders, dissociative disorders, most sexual disorders, and delusional disorders (Summerfeldt & Antony, 2002). In general, administration time of the DIS-IV is estimated to take approximately 90–150 min (Rogers, 2001; Segal et al., 2008). However, administration time may be significantly increased for severely ill patients or those with multiple disorders (Summerfeldt & Antony, 2002). It should be noted that hand scoring is not available on the DIS-IV; instead, the interview must be scored via computer.

The interview is organized into 19 diagnostic modules, which are designed to be independent of each other (Rogers, 2001). Within each module, there are optional termination points, which indicate appropriate places to stop questioning if too few required symptoms are endorsed to meet diagnostic criteria. Items in the DIS-IV consist of standard forced-choice questions and optional probes. If the respondent answers affirmatively to the standard question, the interviewer may ask optional probes. The purposes of these optional probes are twofold: to assess the clinical significance of a symptom, and to assess potential etiology, including physical conditions or substance use (Summerfeldt & Antony, 2002). The DIS-IV includes detailed instructions on when and how to use these probes (Rogers, 2001).

The DIS-IV has been widely used for epidemiological research and has been translated into over a dozen languages (Segal et al., 2008). Its psychometric properties have been reported as excellent (for a review, see Compton & Cottler, 2004).

2.2.2.2 Semistructured Interview Formats

Schedule for Affective Disorders and Schizophrenia

The Schedule for Affective Disorders and Schizophrenia (SADS; Spitzer & Endicott, 1978) for adults is a semistructured interview that was designed primarily for the diagnosis of mood and psychotic disorders (Rogers, 2001). Rather than DSM criteria, the SADS is based on Research Diagnostic Criteria (RDC; Spitzer et al., 1978).

In contrast to the broad-based format of the DIS, the SADS covers only 23 RDC diagnoses in great depth (Summerfeldt & Antony, 2002). In addition to this depth of coverage, another advantage of the SADS is its ability to assess the severity and duration of symptoms (Rogers, 2001).

Partly because it is a semistructured interview, there are several different versions of the SADS that have been customized by different researchers (for a review of SADS versions, see Rogers, 2001). By far, the most widely used versions are the original SADS and the SADS-Lifetime (SADS-L) (Summerfeldt & Antony, 2002). The original SADS has two main sections: Part I assesses the current episode, while Part II assesses any prior episodes (Segal et al., 2008). The SADS-L is similar to Part II of the original SADS; however, the time period is not restricted and instead covers all current and past symptoms (Summerfeldt & Antony, 2002).

Because it is a semistructured interview, the SADS should be administered by clinicians rather than lay persons, due to the amount of inference and judgment required during administration. As with highly structured interview formats, the SADS contains standard questions asked of all respondents, as well as optional probes that are used to clarify incomplete or ambiguous responses. In addition to these verbatim questions, however, clinicians are free to construct other unscripted questions if necessary (Rogers, 2001). Clinicians also are allowed to utilize their judgment in skipping questions throughout the interview (Summerfeldt & Antony, 2002). The semistructured format broadens the range of time needed to administer the interview. Typically, Part I takes 45–75 min to administer, while Part II takes an additional 15–60 min (Rogers, 2001). However, administration may take up to 4 h with severely ill clients (Summerfeldt & Antony, 2002).

Ratings of symptoms on the SADS differ from the highly structured interviews in that they are not based solely on interview responses. Instead, clinicians are encouraged to rate symptoms based on a combination of interview data and information collected from record reviews and/or collateral interviews (Rogers, 2001). Once all ratings have been made, they are summed to produce the following eight scales: depressed mood and ideation, endogenous features, depressive-associated features, suicidal ideation and behavior, anxiety, manic syndrome, delusions/hallucinations, and formal thought disorder (Rogers, 2001; Summerfeldt & Antony, 2002).

The SADS has been widely used in clinical research over the past three decades but has been infrequently utilized in clinical settings, primarily due to its complexity and length of administration (Segal et al., 2008). Its psychometric properties have been reported to be excellent (for a review, see Rogers, Jackson, & Cashel, 2004).

Structured Clinical Interview for DSM-IV

There are two distinct versions of the Structured Clinical Interview for DSM-IV (SCID), a Research Version (First, Spitzer, Gibbon, & Williams, 2002a, 2002b) and a Clinical Version (First, Spitzer, Gibbon, & Williams, 1996). Both versions provide broad coverage of DSM-IV disorders, with the Research Version covering more disorders, subtypes, and course specifiers (Rogers, 2001; Segal et al., 2008).

For many diagnostic categories, information is obtained regarding both current episode and lifetime prevalence. However, the following conditions are only questioned regarding current episode: dysthymic disorder, generalized anxiety disorder, all somatoform disorders, and adjustment disorder (Summerfeldt & Antony, 2002). Administration time ranges from 1 to 3 h, depending upon the version employed and the severity of symptoms (Rogers, 2001). Computer-assisted versions are available to aid in administration (Segal et al., 2008).

There are several modules within the SCID, organized by diagnostic categories (Rogers, 2001). Clinicians may customize each interview by administering only those modules of interest (Summerfeldt & Antony, 2002). Within each module, there are standard questions asked of each client, required probe questions, and optional follow-up questions (Summerfeldt & Antony, 2002). In addition, clinicians have the flexibility of developing unstructured questions if desired (Rogers, 2001). Within each module, there are clear decision trees for discontinuation, if required symptoms are not endorsed (Rogers, 2001). The SCID begins with an open-ended interview portion. Then the modules are presented for assessment of specific disorders (Segal et al., 2008). Similar to the SADS, final ratings are made based on all sources of data, including client interview as well as record review and/or collateral interviews (Rogers, 2001).

The SCID has been translated into a dozen languages and has been widely used both in research and clinical settings (Segal et al., 2008). It has been utilized in over 1,000 studies, and its psychometric properties have been reported to be excellent (for review of the most recent version of the SCID, see First & Gibbon, 2004; for review of an earlier version of the SCID, see Segal, Hersen, & Van Hasselt, 1994).

2.2.2.3 Summary of Specific Interview Formats

In summary, several different structured interview formats exist which differ in terms of level of structure and breadth of diagnostic coverage. Irrespective of which specific measure is chosen, clinicians must establish the reliability of the instrument in their own particular site and must continuously monitor reliability in order to avoid the gradual process of interviewer drift (Orvaschel, 2006). In addition, clinicians must remain aware that even highly structured interview formats were never intended to be used in isolation; instead clinicians should supplement interview findings with additional measures (Orvaschel, 2006).

When deciding which structured interview to administer, clinicians should consider two main factors: (a) the purposes of the interview (Orvaschel, 2006), and (b) practical matters (Angold & Fisher, 1999). First, clinicians should review the particular needs the interview should meet. Some formats assess a broad range of diagnostic categories (DIS), whereas others assess a more narrowly defined range (SADS), so determining the level of diagnostic coverage needed is essential. Some structured formats limit certain diagnostic categories to only current episodes (SCID) while others assess both current and lifetime symptoms (DIS, SADS), so determining the necessary time frame is required (Orvaschel, 2006).

Second, clinicians should review practical issues, such as the time and money involved in training on administration and scoring of each interview. In general, more structured interviews minimize the role of inference, thereby allowing lay persons, or those with minimal clinical training, to conduct these interviews. Semistructured interviews, which allow greater interviewer latitude in determining question wording and order as well as in interpreting responses, require clinically sophisticated interviewers (Edelbrock & Costello, 1988). In addition, most structured interview schedules require clinicians to dedicate significant amounts of time toward training and maintaining adherence to the interview format (Orvaschel, 2006).

2.3 Interpersonal Skills

Empathy and rapport have been called "the most inherently fundamental tenants requisite for successful intervention as a clinician" (Johnston, Van Hasselt, & Hersen, 1998). These important concepts, however, have been difficult to empirically define and to reliably assess. The terms are often used interchangeably in the literature, even though they are distinct concepts. This section will review the basic concepts of rapport and empathy, including ways to utilize these concepts during diagnostic interviews.

2.3.1 Rapport

Rapport has been defined as an alliance with a client, or the establishment of a working relationship in which both parties are able to openly and easily express thoughts and feelings, even those that are complicated or anxiety-provoking (Johnston et al., 1998). It has been characterized "by a sense of being 'on the same wavelength'" (Gruba-McCallister, 2005, p. 42). Morrison (1995) stated that rapport is best developed by the clinician displaying a relaxed but interested and nonjudgmental environment. In other words, clinicians should convey an open attitude to whatever a client presents, a willingness to listen without judgment, and an overriding respect for the client's perspective.

There are many specific ways to encourage rapport, including orienting the client to the process of therapy, thoroughly discussing the client's expectations for therapy, and coming to an agreement regarding the purpose and goals of sessions (Gruba-McCallister, 2005). In addition, rapport may be enhanced by clarifying client statements, using paraphrasing or summarizing to express understanding of client issues, handling emotionally sensitive material in a calm and understanding manner, being attentive and focused on client statements and behaviors in the session, and providing hope that change is possible. Identifying the client's language and using it during sessions may also enhance rapport (Ledley & Rauch, 2005), as can mirroring the client's body posture, specific gestures, facial expressions, and voice tone (Wolf, 2005). Humor may at times enhance rapport, but it must be used carefully

(Ledley & Rauch, 2005). Humor may be off-putting to some clients, particularly in the first few sessions, so clinicians may not want to engage in too much jocularity during the initial diagnostic interview. Finally, clinicians must learn to monitor their own feelings toward the client and attend to any discomfort or negative feelings in order to enhance rapport (Morrison, 1995).

Rapport may be damaged by not attending to client concerns. Focusing on a strict protocol of questions in a structured interview may damage rapport if the client does not feel heard or believes that the clinician's agenda is more important than the client's. Rapport may also be damaged if the pacing of questions in a structured protocol does not match the client's comfort level (Ledley & Rauch, 2005).

Clinicians must allow sufficient time for trust between clinician and client to develop. Some clients and clinicians may develop a good rapport in the first session, but other clients and clinicians may require many sessions before rapport is established. In addition, it is important to note that the level of rapport is ever-changing; therefore, rapport must be assessed consistently, both across and within sessions.

2.3.2 Empathy

Empathy has been defined as "the ability to understand people from their frame of reference rather than your own" (Cormier & Nurius, 2003, p. 65). Empathic responding enables clinicians to express that they are "accepting, understanding, and confirming [a client's] 'world,' without making judgments about that world" (Johnston et al., 1998, p. 45). Responding empathically to client concerns is a necessary set of skills for clinicians to learn in order to enhance the quality and effectiveness of the therapeutic relationship. Specifically, responding empathically can assist the therapeutic process in five ways: (a) by building rapport and the working alliance with clients; (b) by encouraging client exploration of feelings, thoughts, and behaviors; (c) by allowing the client to explore ambivalence toward change; (d) by providing methods to clarify client responses in session; and (e) by providing the foundation for later interventions (Johnston et al., 1998; Miller & Rollnick, 2002).

There are two main types of empathic responses: validating and limit-setting responses (Cormier & Nurius, 2003). Validating responses are those that mirror the client's feelings, experiences, and behaviors (Johnston et al., 1998). Rather than attempting to correct the client's view or perception, a validating response would allow the client to feel heard. For example, if a client arrives late to a session and is angry that she had trouble finding a parking spot, a clinician's first response may be to problem-solve with her ways she can budget enough time to find a parking space and still get to the session on time. Instead, to improve the therapeutic relationship, the clinician may want to offer a validating response, which would offer understanding of the difficulties the client faces in getting to session and the frustration she is feeling. By feeling heard and having her feelings validated, it may encourage the client to open up about the many difficulties she has in navigating through her daily life.

Limit-setting responses allow the clinician to create an environment of protective containment and an atmosphere of safety in the session, which functions to encourage client growth (Cormier & Nurius, 2003). For example, if a client repeatedly interrupts the clinician, the clinician can provide a limit-setting response by noting the behavior, explaining that it seems to be the client's way of expressing how she feels, and encouraging the client to express her feelings in another way.

Continually utilizing empathic responses may create what has been called an effective therapeutic holding environment (Teyber, 2000; Winnicott, 1958, as cited in Cormier & Nurius, 2003). In such an environment, not only do clinicians convey deep understanding of clients' experiences, they also provide a safe and structured environment for clients to experience what they may perceive as overwhelming emotions and/or thoughts. As Cormier and Hackney (1999) noted, clinicians "stay with or hold the client's feelings instead of moving away or distancing from the feelings of the client" (p. 99). Responding to affect rather than content of a client's statements is one way to create such an environment and encourage client growth (Johnston et al., 1998).

2.4 Summary and Recommendations

Effective interviewing involves not only the ability to ask the appropriate, relevant question for each clinical situation but also to set the stage to obtain the most informative, complete answer from each client. Clinicians formulate which questions to ask by the type of interview format they utilize: structured or unstructured. They obtain useful and relevant answers to these questions by their skillful and continuous use of empathic responding and rapport-building behaviors. Thus, technical knowledge and interpersonal skills must go hand-in-hand for an effective diagnostic interview to be conducted. They must be integrated flexibly to allow for different client presentations and clinician strengths/preferences.

Unfortunately, there is little research available to help guide clinicians on the optimal method of conducting a diagnostic interview. First, although there is a plethora of literature on rapport and empathy, the majority of these articles are theoretical or at best anecdotal in nature. There is much advice to be found on how to develop an empathic stance but few empirical studies on the impact on client functioning of rapport-building behaviors or empathic responding.

Second, although interviewing strategies, particularly structured interview schedules, have been studied for their psychometric properties, several areas remain that have not been adequately studied. For example, there is little research on the impact on rapport when utilizing more structured interview schedules. Breton, Bergeron, Valla, Berthiaume, and St. Georges (1998), in a study on the reliability of the child version of the DIS, suggested that individuals who have not established rapport with the clinician may not disclose information or request clarification of confusing questions. How this may impact the ultimate diagnostic formulation is still unclear. There is also little research on the impact of ethnicity or other diversity factors when using structured interviews (Grills-Taquechel & Ollendick, 2008). Finally, researchers have not adequately examined the acceptability to clients of either an unstructured or structured approach to interviewing. Clinicians continue to utilize an unstructured approach, assuming that this format is more acceptable to clients, without ever testing that assumption empirically. Clinicians continue to avoid structured interview formats, assuming that they may be off-putting to clients. Particularly with highly structured interviews which must be read verbatim, there is a fear that clients may be distanced from the diagnostic process and become bored or frustrated. It is thought that even semistructured interview formats may be offensive or insulting to clients if they perceive the repeated questions asked throughout several diagnostic modules to be redundant and evidence that the interviewer is not listening. Only one study has even indirectly studied client satisfaction utilizing an alternative administration format for the child version of the DIS (Edelbrock, Crnic, & Bohnert, 1999). They found that allowing respondents to control the administration order of the diagnostic modules, a large departure from the highly structured format of the DIS, resulted in positive client reactions. Further studies assessing client satisfaction with both structured and unstructured approaches may help clinicians make more informed decisions for each client.

In the meantime, clinicians should become their own local clinical scientist (Stricker & Trierweiler, 1995). This means that clinicians should utilize a variety of interview formats and continually assess the impacts of each format on their clients. Clinicians could create short, setting-specific surveys of client satisfaction that could be administered at the end of the diagnostic interview. They would then need to utilize the resulting data to make more informed choices about which types of clients should receive structured versus unstructured interviews. Clinicians could tape sessions with clients and review portions of tapes for the impact of various rapport-building behaviors and empathic responding. In short, clinicians must begin utilizing data, either from large-scale empirical studies or from systematic observations of their own practice, to make effective clinical decisions about each individual client.

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Chapter 3
Presenting Problem, History of Presenting Problem, and Social History

Philinda Smith Hutchings and Thomas B. Virden

The client usually approaches the interview seeking assistance to address a problem. The task of the interviewer is to gather information about the client, the problem, the circumstances, and context, as well as the history, in order to conclude with a diagnostic impression. The diagnosis sets the stage for intervention, because the first step in addressing a problem is to define it, and it must be defined carefully and accurately. The most skillfully implemented intervention will fail miserably if it seeks to address the wrong problem. Therefore, the successful diagnostic interview relies on the thoughtful and well-planned gathering of information about the problem in order to arrive at a reasonable and supportable diagnosis (Rosqvist, Björgvinsson, & Davidson, 2007).

3.1 Presenting Problem

After establishing an initial connection with the client and setting the stage for the interview, the interviewer should ask the client for the presenting problem. This is usually accomplished through general or open inquiry, such as "Please tell me what brought you here to see me today," or "How can I help you today?" The presenting problem may take a variety of forms, including a symptom (e.g., trouble sleeping), a conflict (e.g., relationship discord), a stressor (e.g., unemployment), an emotion (e.g., anxiety), a behavior (e.g., fighting), or any of a number of other things. On occasion, the presenting problem may not even appear to be problematic (e.g., recent marriage), until more explanation is elicited. In any case, the interviewer must understand the presenting problem and how it poses difficulties for the client.

Immediately upon learning the presenting problem, the interviewer should generate at least five diagnostic hypotheses about the most likely disorders that would

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lead a client to present this problem. This is the beginning of the differential diagnostic process; the interviewer uses his or her knowledge of psychopathology and where symptoms occur in the lists of diagnostic criteria for various disorders to generate those disorders as likely hypotheses for the client's eventual diagnosis. This is an important step in the interviewing process because it guides the interviewer to seek specific information in the course of the interview that will confirm or eliminate each of these hypotheses (Othmer & Othmer, 2002). Generating at least five hypotheses will ensure that the interviewer considers several alternatives and will therefore investigate the hypotheses thoroughly.

At this point in the interview, the diagnostic hypotheses may be either specific disorders or categories of disorders. For instance, if the presenting problem is difficulty sleeping, the hypotheses may include the categories of sleep disorders, anxiety disorders, mood disorders, substance-related disorders, and adjustment disorders, because difficulty sleeping appears as a symptom of several specific disorders within these categories. Within these categories, difficulty sleeping might be due to primary insomnia, primary hypersomnia, nightmare disorder, or sleep apnea in the sleep disorders; it might be indication of generalized anxiety disorder, acute stress disorder, or posttraumatic stress disorder in the anxiety disorders; it might indicate either major depressive episode or a manic episodes in a mood disorder, or dysthymia or cyclothymia; it may be related to abuse of or dependence upon a psychoactive substance; and it may be a symptom of an adjustment disorder with depressed mood or anxiety. Alternatively, if the presenting problem is fighting, a much shorter list of likely hypotheses, in the form of specific disorders, may be generated. These hypotheses may include conduct disorder, adjustment disorder with conduct disturbance, intermittent explosive disorder, antisocial personality disorder, and substance-related disorders. Interviewers should remember that they may need to include disorders in their list of hypotheses that do not list the presenting problem as a symptom criterion, but where it is reasonable to question whether the disorder might manifest in such a way as to lead a client to present this problem. For instance, hallucinations and/or delusions are not listed as symptom criteria for a Manic Episode, but many people experience psychotic symptoms such as hallucinations and delusions during episodes of elevated mood, so this is a reasonable hypothesis to explain the presentation of psychotic symptoms.

Generating diagnostic hypotheses from the presenting problem alone takes some practice, because doing so involves using knowledge of psychopathology differently than the way it was learned. When students study psychopathology, they learn about a category of disorders with common characteristics or features, and learn the symptoms of each of those disorders, from the top down. When the interviewer uses this knowledge in to generate diagnostic hypotheses, the evaluator must mentally scan the lists of symptom criteria across disorders and categories, and identify disorders with the presenting problem in that list, from the bottom up.

The interviewer holds these hypotheses in mind, and now follows up on the presenting problem to gather more specific information. It is important to understand exactly what the client means by the presenting complaint, so the interviewer asks about the specific characteristics (e.g., Jenkins, 2007). "Fighting" could mean arguing, disagreements, angry outbursts, or physical altercations and assault. “Fits” might mean seizures, fainting spells, distress, or temper tantrums. It is essential to understand the client’s cultural context and traditions to determine when a presenting complaint represents a problem or culturally normative behavior or circumstance (Fontes, 2008). Greater awareness of the client’s background and cultural traditions will help the interviewer prevent misunderstandings and the unwarranted perception of pathology in culturally different practices (Turner, Hersen, & Heiser, 2003). Even when interviewing someone from the same cultural background and language history, misunderstandings can be common, so it is wise to ask the client to expand the description of the presenting problem to ensure understanding.

In general terms, there are several aspects of the presenting problem that the interviewer must understand, including the onset, duration, course, severity, and associated stressors (e.g., Watson, & Gross, 1998; Othmer & Othmer, 2002). Specific questions are asked to determine these aspects, such as,

- When did you begin having trouble sleeping?
- How long has this been going on?
- Has it been getting worse or better; going up and down?
- How much sleep are you getting each night?
- What else was going on in your life when this began?
- Are there other factors that make it better or worse?

These questions will vary according to the nature of the presenting problem. Some presenting problems are discrete incidents of behavior or symptoms, such as fighting or panic attacks. Other problems are ongoing or continuous situations or symptoms, such as relationship discord or depressed mood. The interviewer needs to ask questions appropriate to the problem to assess onset, duration, course, severity, and associated stressors.

The onset of the presenting problem may be date and time certain, for instance, “My first panic attack was May 14, 2006 at 2:00 p.m.” or it may be identified as a general time frame, “I believe I first noticed I had trouble sleeping when I began college in1975.” The interviewer needs to tailor questions to identify onset depending upon the nature of the presenting problem, such as, “When did you become dissatisfied with your relationship,” “Do you remember your first fight,” or “When did you first have trouble sleeping?” For some problems with insidious or gradual onset, the interviewer will need to determine when the client noticed it had become a problem, while those with acute or sudden onset may be specifically determined. Similarly, questions about duration and course need to be appropriate to the problem, such as “How long have you had trouble sleeping,” “Are there times when your relationship improves, and how long does this last,” “Has it been getting worse the whole time,” or “How much time goes by in between episodes?”

Assessing the severity of the presenting problem also requires consideration of questions specific to the problem. There are several factors that might be included in an assessment of severity, including frequency, intensity, and impact (Cormier & Cormier, 1991). Problems characterized by discrete events or episodes should be assessed for frequency, such as “How many panic attacks have you had in the past month," or "How many fights have you had?" Problems that are ongoing, continuous states cannot be described in terms of frequency, and should be assessed in terms of amount or intensity, such as "How many hours do you sleep at night," or "How serious is your relationship problem?" The interview also investigates the severity of the problem by asking about its impact, such as "Does the difficulty sleeping affect your ability to work," "Are you experiencing legal problems as a result of fighting," or "How has this affected your relationships?"

The interviewer must also investigate associated stressors of the presenting problem. There are two aspects of this inquiry, events temporally related to the onset of the presenting problem, and stressors resulting from or related to the presenting problem. This line of inquiry investigates the context of the problem, and helps the interviewer to evaluate possible causes or precipitants of the problem. The interviewer will understand a client's difficulty sleeping differently if it began when she moved to a new apartment near an airport or if it began when she discovered that her husband was having an affair, or if it began when her mother passed away. Questions such as, "What else was happening about the time you began having trouble sleeping," "What was going on when you began to feel depressed," or "What sorts of things seem to trigger these fights," will help the interviewer evaluate stressors associated with the onset of the problem. To evaluate stressors resulting from the presenting problem, the interviewer can ask questions closely related to those assessing the impact of the problem, such as, "Has the fighting produced any other problems for you," or "How did the panic attacks affect your work or your social life?" The stressors that function as precipitants of the client's decision to seek intervention for the problem can be assessed by asking such questions as, "What made you decide to seek help," "What's going on that led you to make this appointment," or "Why now?"

Assessment of the onset, duration, course, severity, and associated stressors prompts review of the initial list of diagnostic hypotheses. This information will indicate which of these hypotheses are more likely, moving them up to the top of the list, and which are less likely or can be ruled out.

The next step in evaluating the presenting problem is to identify associated symptoms (Watson & Gross, 1998). The line of questioning will be guided by the list of diagnostic hypotheses, investigating the presence or absence of other symptoms the interviewer expects to observe in each of the other possible conditions. For instance, when the presenting problem is difficulty sleeping, we expect to find depressed mood or loss of interest in activities if the problem is depression, elevated mood it is mania, excessive worry if the problem is generalized anxiety disorder, nightmares or flashbacks if it is posttraumatic stress disorder, and so on. Many times, the client may volunteer this information as part of the initial assessment of the presenting problem, but other times, the interviewer needs to ask questions about these specific symptoms to evaluate the diagnostic hypotheses. It is prudent and efficient to ask about essential or most important symptoms associated with the hypotheses first. If the client reports neither depressed mood nor loss of interest in activities, the interviewer can rule out major depression without asking about appetite disturbance, excessive guilt, or psychomotor retardation.

Try this exercise: Take a piece of paper, write a presenting problem on the top and draw two lines down the page to divide it into three columns. On the left side, write as many diagnostic hypotheses as you can generate (at least five), and in the middle column, write the associated symptoms you need to investigate in order to confirm or rule out that hypothesis. Now think about the questions to ask a client in order to determine the presence or absence of these associated symptoms, and write them in the right column. See the example in Fig. 3.1.

The interviewer must assess the onset, duration, course, severity, and associated stressors of these associated symptoms similar to the assessment for the presenting problems. It is important to determine if any associated symptom preceded development of the presenting problem, or has been present at times the presenting problem was absent, in order to help the interviewer to evaluate if these symptoms are related to or independent of the presenting problem. For instance, if the presenting problem is difficulty sleeping, and the client reports problem drinking soon after the onset of the difficulty sleeping, one might draw different conclusions about the relationship between alcohol consumption and sleep than if the client reported problem drinking for some years before the onset of sleep disturbance. If there are several associated symptoms, the interviewer might ask if they are all related in their characteristics, for instance, "Did all of this begin about the same time," or if any of these symptoms were experienced independent of the others.

Once again, the interviewer should consider the list of diagnostic hypotheses using the information gained about associated symptoms and consider which ones remain viable explanations of the presenting problem, which can be ruled out, and what new hypotheses should now be added to the list. In your exercise, cross off the diagnoses you can confidently rule out, underline the ones supported by the new information, and add new ones to the left column.

Once the interviewer has arrived at this point, it if often helpful to summarize the presenting problem, asking the client to verify or correct his/her understanding of it. This not only allows the interviewer to check with the client about the perceived problem, but also sets the stage to move to the next phase of the interview. It provides a sort of "punctuation mark" to demarcate the end of one phase and the transition to the next phase. For example, "As I understand it, you began having difficulty sleeping about 2 months ago, when you were laid off from work, and since that time you have also felt depressed, nothing is fun anymore, you feel irritable, tired, can't seem to concentrate on anything, and you've lost about 15 pounds without dieting. Is that right?" The client can now add important details that the interviewer has neglected to assess, or can endorse the summary, and the interviewer can now move on to inquire about the history of this problem.

3.2 History of Presenting Problem

It is important to determine if this presenting problem is the same or similar to problems experienced in the past or if this is the first time the client has had such a problem. Similar to the assessment of symptoms, the interviewer needs to determine

Hypotheses	Associated symptoms	Questions
Sleep Disorders: Primary insomnia, Nightmare Disorder, Sleep Apnea	Difficulty going to sleep or staying asleep, nightmares, loud, irregular snoring	How long does it take you to go to sleep? Do you wake up frequently during the night? Do you have nightmares? Has anyone ever told you that you snore loudly?
Anxiety Disorders: Generalized Anxiety Disorder, Acute Stress Disorder, Posttraumatic Stress Disorder	Excessive worry about a number of issues, numbing or detachment, recurrent recollections of trauma	Do you worry about a lot of things? Do you feel like you are emotionally numb? Are you troubled by intrusive memories of a horrifying event?
Mood Disorders: Major Depressive Disorder, Bipolar Disorder, Dysthymia, Cyclothymia	Depressed mood, loss of interest in activities, elevated mood.	How is your mood? Have you lost interest in things you used to enjoy? Do you feel "on top of the world?"
Substance Abuse or Dependence	Use of a substance, tolerance, withdrawal, or compulsive use.	How much do you drink? What drugs are you using? Do you have to use more to feel the effect? What happens if you stop using?
Adjustment Disorder with Depressed Mood or Anxiety	Depressed mood, nervousness	How is your mood? Are you feeling jittery or nervous?

Fig. 3.1 Investigation of diagnostic hypotheses

when the problem first began, what impact it has had on the client's well-being and functioning, and what course it has taken. Some disorders are characterized by episodes of symptoms with full recovery in between episodes, whereas others have a course of continuous disturbance and deterioration of function. The interviewer's assessment of the history of the presenting problem will add to the process of differential diagnosis and refine the impression of the nature of the problem.

In the event that the presenting problem is one that has happened before, the interviewer will need to determine the beginning and course of each previous episode. It may be helpful to ask questions such as, "Have you ever felt this way before," or "Is this the first time you felt this way?" If previous episodes are reported, one can often elicit information about the onset, duration, and course simply by asking about the episodes, "Tell me about that," since the client has just been answering questions about these factors. Otherwise, it may be necessary to prompt the specific information required to evaluate previous episodes, e.g., “Was it worse then,” “Did it last longer,” or “Did it feel much the same that time, or was it different then?”

It is also important to understand the client’s explanation of the development of the problem, its causes or precipitants, the maintaining factors, and the client’s attempts at resolution or treatment. This is often called insight, and an evaluation of the client’s understanding of the development and maintenance of the problem can provide diagnostic clues as well. The client may volunteer an explanation or the interviewer may ask a client directly: “What do you think caused this problem,” “What made it worse now,” and “What have you tried to do about it?” Asking about previous treatment is part of this assessment, including visits to health-care professionals as well as alternative and nonprofessional treatment methods, such as meditation and talking to friends. A client may state, “The doctor told me it’s all in my head, but I think that’s just because he can’t figure out what’s wrong with me,” indicating the presence of unexplained medical complaints as well as frustration with previous treatment attempts.

Information about previous treatment for this presenting problem is also important. The interviewer should inquire about a history of counseling, psychotherapy, medications, and other interventions; when were they attempted, what impact did they have on the problem, have they been discontinued, and if so, why? This is a convenient time to ask for permission to contact any current or previous service providers to exchange information, if desired. History of treatment efforts for the presenting problem also provides diagnostic information; for instance, if the client has been in treatment for depressive symptoms continuously for the last year, an acute adjustment disorder can be ruled out.

By this time, the interviewer has gained quite a lot of information about the client’s problem to assist in the diagnostic process, and has probably been able to narrow the list of diagnostic hypotheses, or may have expanded the list to include new possibilities. In order to further evaluate the list of hypotheses, the interviewer now needs to understand the client’s background, development, and strengths.

3.3 Social History

There are many areas of the client’s social history to be assessed, including developmental milestones, social and sexual functioning, diversity, educational, vocational, legal, family, substance use, trauma, and medical history. These areas can be assessed by a variety of different methods and approaches. Some interviewers take each section separately and inquire about each one in turn, keeping in mind the questions they need to address to confirm or rule out their remaining diagnostic hypotheses. This can be rather time consuming and requires frequent transitions from one topic to another, although if the interviewer has an “intake form” that requires filling out information on these areas sequentially, it can be convenient (e.g., Hook, Hodges, Whitney, & Segal, 2007). However, we recommend a more global method that roughly resembles a chronological account of the client's life, during which the interviewer asks questions about all of these areas as the biography progresses. Then one can follow up with any missing information at the end without disrupting the general life story.

To implement this "biographical" method of collecting the social history, the interviewer marks the transition with an introductory statement and inquiry, such as, "Okay, now I need to understand some background information. Tell me about your childhood," or "Let's go back a bit now to your childhood. When and where were you born?" The interviewer then progresses through the lifespan, directing the client to respond to specific queries about different areas of the social history during the narrative. In the course of this questioning, the interviewer must keep the list of diagnostic hypotheses in mind, to be sure to gather information relevant to each of them in the client's social history. For instance, if a diagnostic hypothesis is antisocial personality disorder, evidence of conduct disturbance must be apparent prior to the age of 15, and a family history of major mood disorder may support an impression of bipolar disorder.

While we recommend the chronological method of social history assessment, we will discuss the kinds of information to gather by topic area. No interviewer will collect all of this information for each client, but it is especially important to collect information that is out of the ordinary, unusual, or clinically relevant, in order to evaluate the diagnostic hypotheses or to understand the client's strengths and challenges and to arrive at treatment recommendations.

3.3.1 Developmental Milestones

The interviewer may inquire about any difficulties the client's mother experienced during pregnancy, such as gestational diabetes or eclampsia, or during childbirth, such as premature birth or forceps delivery. Some client's may know about their APGAR score, a numerical indication of the newborn's general health. Any unusual feeding problems in infancy, low birth weight or difficulty gaining weight may be queried. Then the interviewer will want to ask about the achievement of a variety of developmental milestones, for example, the age at which the client sat up unassisted, crawled, walked, talked, and ate solid food, and especially any delay in achievement of these milestones. Delay in speech development, if present, should be further assessed to determine if the delay was in vocalization, speech clarity, forming sentences, or involved loss of speech after apparently normal development.

Assessment of the age and process of toilet training is also needed. The age at which the client no longer needed to wear diapers during the day and at night may be quite different, so ask about nocturnal bed-wetting in addition to potty training. Any recurrence of bed-wetting after successful toilet training should be noted. It may also be important to ask about self-soothing behavior or transitional objects during early childhood. Thumb-sucking or rocking are common self-soothing behaviors and many children have a favorite blanket or stuffed animal that they use to comfort themselves.

It is common for clients to report remembering nothing at all about their early childhood development nor hearing anything from their parents about it. This usually indicates that there was nothing remarkable about their achievement of developmental milestones, no significant delay or unusual behavior. It is also important to bear in mind that there is a considerable degree of variability as to when or how a child achieves certain milestones (Boggs, Griffin, & Gross, 2003). As such, it may be advisable that the interviewer consider a developmental delay or difficulty as diagnostically relevant only if it is particularly aberrant or resulted in some difficulty to the child or parent.

Sample questions to ask:

- Did your mother ever tell you anything about any problems during pregnancy or delivery with you?
- Do you know if you sat up, crawled, and walked at the usual time?
- Do you remember anybody telling you about your toilet training or bed-wetting?
- Do you remember them saying anything about you learning to talk?
- Are you aware of any health or development problems in your early childhood?
- Do you remember anybody ever telling you anything unusual about your early childhood development?

3.3.2 Family of Origin History

There are at least two essential components of family history to assess, family functioning and family history of disorders. The interviewer should inquire about family members, their roles, ages, interactions, and changes over time. It is important not to limit inquiry to a traditional "nuclear" family, but to inquire about who was living in the household while the client was a child, who filled parental roles, who were the siblings, and what extended family members were involved in daily and other family activities. It is best to begin with open and broad inquiry, such as, "Tell me about your family," and to follow up with questions to understand how the client defines family, rather than to impose a definition of family on the client by asking "Tell me about your immediate family," or "Tell me about your mother and father, brothers and sisters." One can then learn about the composition of the client's family, and the client's position within it, including factors such as birth order.

Once the interviewer understands the composition of the client's family of origin, it is time to inquire about its functioning. It is important to understand the child-rearing practices that the client experienced and the nature of the relationships in the family. Some areas of inquiry include methods of reward and discipline, patterns of communication, the warmth or difficulties in interaction with family members, and the closeness or distance in relationships the client experienced. The interviewer will also want to know about family traditions and practices surrounding holidays and important life events and transitions, such as the client's first day at school or birthday celebrations, and any ceremonies marking transition in life phases. Inquiry about the nature and process of conflict resolution, or the lack thereof, is also needed.

In the course of this line of inquiry, the client may volunteer information about family history of medical and psychological disorders or problems. If so, the interviewer will still need to check to see if there are any other problems in the family history beyond the ones reported. Sometimes clients do not volunteer information about disorders experienced by family members, and the interviewer needs to introduce the inquiry. It may be important to determine whether the family member with a reported problem or disorder is a blood relative, in order to assist in the diagnosis of disorders that have a genetic contribution to etiology. For instance, schizophrenia has been shown to be far more prevalent in first-degree relatives of clients with schizophrenia than in the general population (Gottesman, 2001). For some other disorders that are not known to have a genetic or familial pattern, the interviewer may need to inquire about how the disorder impacted the family functioning, for example, frequent absences of a caregiver from the home, changes in disciplinary practices, or early assumption of adult responsibilities.

Sample questions to ask:

- Tell me about your family when you were growing up.
- Who lived in the household?
- How did you get along with them?
- Who took care of the discipline, and how?
- What sorts of family traditions did you observe?
- Were you close to your (mother, father, brother, grandmother, etc.)?
- How did you all show affection?
- How did arguments get resolved in your family?
- Did anyone in your family have psychological problems or major medical problems?
- Did anyone in your family have alcohol or substance use problems?
- How did that affect you?

3.3.3 Educational History

The essential elements to include in educational history are when the client started school, how far they went in school, and what particular strengths or difficulties they had in learning. Clients will usually respond to direct questions about education, such as, "Where did you go to school," and "How far did you go in school?" To assess how well the client did in schooling, it may be best to initially ask about strengths as well as weaknesses, “What were your best and worst subjects,” rather than a question that might be perceived as challenging, such as “What kinds of grades did you get in school?” The interviewer can then steer the inquiry to performance issues, difficulties learning material or learning disorders, or behavior problems.

Educational history and performance information aids the differential diagnosis process in several different ways. In evaluating neuropsychological information, it is useful to have an idea about a client’s previous intellectual function, and education history can give a general impression of that, so that if a client is currently functioning at a very low level, but had a college education with As and Bs, a deterioration of function since college may be indicated. On the other hand, a history of special education classes and poor academic performance in the same, low-functioning client may support a diagnostic hypothesis of mental retardation or pervasive developmental disorder.

Sample questions to ask:

- When did you start school?
- What subjects did you like best, and which did you like the least?
- Did you have any difficulties in school?
- What was the last grade you complete?
- Have you participated in educational programs outside of school?
- What were your strengths and challenges?

3.3.4 Social and Sexual Functioning

The interviewer will need to ask the client about social relationships and development, romantic relationships, and sexual activity. Childhood friendships, after-school activities, membership in organizations, and participation in athletic or sport activities all give the interviewer information about the client’s social development and degrees of relatedness to others. It is often convenient to ask about these activities while gathering information about the client’s educational activities, such as, “Did you have a few close friends in school,” “Did you participate in organized sports while in school,” or “Were you a member of Scouts or something like that?” Some disorders are characterized by limited social relationships and interactions even in early childhood, such as autism, while other disorders may be characterized by unusual patterns of social relationships, such as gender identity disorder.

It is important to inquire about romantic or dating relationships in a culturally sensitive way, not assuming a heterosexual development of interest, or intruding unnecessarily on cultural or religious values or prohibitions. One can ask about the development of romantic interest, and about first sexual experiences in a rather open way, and then follow up with more specific questions. “Do you remember when you first developed a romantic interest in someone,” and then, “Who was that?” “When was your first sexual experience,” and then, “What was the sexual contact and activity?" Clients are often reticent to volunteer information about sexual activity, dysfunction, and abuse due to social and cultural norms that discourage such self-disclosure to strangers (Fontes, 2008). This information is clinically important, so the interviewer will need to inquire about it in a matter-of-fact, straightforward way, indicating that sensitive discussion of sexuality is accepted and expected.

The interviewer will want to understand the client's history of formal and informal liaisons, such as marriages or committed relationships, and whether or not the client has children. Establishment of new family structures then needs to be understood, so the interviewer will want to ask some of the same kinds of questions to understand the new family functioning as were asked about the client's family of origin, including child-rearing practices, division of responsibilities, methods of conflict resolution, and so on.

Sample questions to ask:

- Tell me about your childhood friends.
- What sorts of social activities did you enjoy?
- Did you belong to any clubs or organizations?
- How about friendships now?
- What do you do for fun?
- Do you remember your first romantic interest? Who was that?
- When did you start dating?
- When was your first sexual contact? What was it? With Whom?
- Have you been in a committed relationship or marriage?
- Do you have any children? Do they live with you?
- Who lives in your household now?
- What will this relationship be like 5 years from now?

3.3.5 Vocational History

The client's history of work activities should be assessed. This line of questioning may flow naturally after inquiry about educational history, as people often begin work after completing some course of education. The interviewer should not assume, however, that clients did not work while they were in school, or that they went to work after they were no longer in school. One might ask "Did you have a job while you were in school," and "Then what did you do," to inquire about occupations after formal schooling. The nature of work activities informs the diagnostic process as well; occupations that do not appear to be consistent with their educational achievements or a series of jobs of short duration rather than a career of rather stable positions in the same or similar fields may indicate maladaptive patterns consistent with personality disorders. It is important to inquire about military service and the nature of all employment activities, such as exposure to trauma and occupational hazards and stressors. For instance, avoidance of eye contact may be expected in individuals who have worked in underground mining for many years, because it is blinding to look directly at someone with a light source on one's helmet and pointing forward. Some occupations require exposure to solvents, while others include frequent exposures to dangerous conditions. It is also important to understand periods of unemployment in the chronology and what led to the unemployment or changes in occupation. All of this information helps the interviewer understand and interpret the client's behavior and functioning.

Sample questions to ask:

- What kinds of work have you done?
- Have you served in the military?
- How about volunteer work or positions?
- What was the longest period of time you ever held a job?
- What did you do while you were unemployed?

3.3.6 Diversity

Diversity is defined here in its broadest sense, including but not limited to race, ethnicity, culture(s), age, disability, gender and gender identity, language, nationality, religion, socio-economic status, and sexual orientation. This does not mean that the interviewer needs to ask the client for an explanation of each of these factors, but the interviewer needs to understand the context of the client's life and experience. Understanding diversity issues helps the interviewer to understand and interpret the client's history, behavior, and outlook. Despite the interviewer's knowledge and experience with diversity and diverse groups, the client is the expert on his or her own experience. The purpose of the diagnostic interview is to identify and assess any psychopathology, but it is equally important to identify and assess "normalcy" and not to misunderstand and misinterpret difference as psychopathology (Fontes, 2008).

Information about racial, ethnic, and cultural backgrounds is usually obtained during inquiry about the client's family of origin. One should not rely on assumptions about racial identity from appearance, but inquire about the client's self-identification of race. The interviewer will need to ask about the client's first language, and what language was spoken at home. It is also important to understand regional and cultural differences in language, in "accent" and word usage. For instance, people living in the Northeast or Midwest of the United States may find a "Southern drawl" charming, but are unaware that commenting on it can be offensive. While investigating social history, as stated previously, the interviewer should avoid making assumptions about gender identity and sexual orientation, and ask about it instead. Asking about religious upbringing and current practice or lack thereof, is an important area of inquiry which helps the interviewer understand issues regarding spirituality. Information about socio-economic status helps one to understand the resources available both in the client's history and currently. Significant changes in resources, increases, decreases, or both, over the lifespan can create significant stress and place strains upon the client's coping strategies. Age can be calculated from the client's date of birth or asked directly, and developmental issues related to age are important, but age has many implications for life experiences as well. Women born in the 1940s and 1950s are likely to have a very different gender experience than women born in the 1970s and 1980s. Similarly, men who reached the age of 18 in the 1960s had different stressors and experiences than men who reached that age in 1980s, because of the military draft and the Vietnam War. Not all disabilities are apparent, and the interviewer should ask about abilities and experienced difficulties, their history and development, and how they experience the impact of any conditions. Not all conditions that may be termed "disabling" are experienced as disabilities. For instance, many hearing impaired persons do not perceive deafness as a disability, but rather as a different set of abilities, so one might view such a person as different in culture, language, and experience, but not as disabled.

Sample questions to ask:

- How do you describe your race and ethnicity?
- What language was spoken at home when you were growing up?
- How would you describe your sexual orientation?
- Were you raised in an organized religion?
- Are you practicing a religion now?
- How would you describe your family's economic status? And now?
- How would you describe your current age and phase of life?
- Do you have any conditions that interfere with your life or function?

3.3.7 Legal History

Clients are sometimes reluctant to report violations of legal restrictions, so the interviewer needs to ask about it directly, whether the client has volunteered information or not. In addition to asking about a history of arrests, convictions, misdemeanors and felonies, it is important to ask about civil actions as well. The interviewer will need to inquire about difficulties in childhood, adolescence and adult life, about interactions with law enforcement personnel, the judicial system, and attorneys. One might start with a general question about involvement in the legal system, "Tell me about any legal problems," and then follow up with specific questions, "Have you ever been arrested," "Have you filed any lawsuits," "Have you been incarcerated?" Some disorders are characterized by violations of legal restrictions, including conduct disorder and antisocial personality disorder, while other disorders may include an increased likelihood of violations, such as dependence on illegal substances or pathological gambling. Some disorders are associated with greater likelihood of filing frequent complaints and lawsuits, including paranoid personality disorder.

A history of victimization is important to understand. Crime victims have not only experienced the distress or trauma of being targeted, they also may have had experiences with the legal system that are sometimes as distressing as the crime itself. While some clients may have had a very supportive and satisfying experience with law enforcement and the court system, others may report frustration and anxiety, or even feeling as if they were victimized again. It is not the interviewer's role to right any wrongs or to determine the worth or merit of any complaints, but to understand the perspective and the experience of the client and how that experience has impacted their functioning, their support system, and their outlook. Many clients who are ordered by the court to obtain a psychological evaluation will explain at length the circumstances of the charges, the court and legal proceedings, and so on, making it difficult to focus on the purpose of the interview, usually to screen for the presence of psychopathology. At such a time, the interviewer will need to refocus the line of inquiry toward other areas of social history.

Sample questions to ask:

- What sorts of legal problems have you had?
- Tell me about any arrests and convictions.
- Have you been in jail or prison?
- Have you filed legal complaints or lawsuits against anyone?
- Have you been sued?
- Have you been the victim of a crime?
- What was your experience with the legal system?

3.3.8 Trauma and Abuse History

The interviewer should not assume that clients will spontaneously offer information about a history of trauma or abuse. Even though such a history may appear to be clinically relevant, clients are often reluctant to reveal this information, because talking about it makes them uncomfortable. For this reason, all interviews should include inquiry about traumatic events and possible abuse, even if the interviewer has no diagnostic hypotheses about acute stress disorder, posttraumatic stress disorder (PTSD) or the abuse codes. The American Psychological Association (APA) (2004) estimates that 70% of adults in the United States have experienced at least one traumatic event, that 20% of these develop symptoms of PTSD, and more women than men develop PTSD because they are more likely to experience domestic violence and sexual assault or abuse. Childhood physical and sexual abuse has been associated with a variety of other disorders, including dissociative identity disorder (Sadock & Sadock, 2007).

It is best to avoid using the words, "abuse," and "rape," in questions during the interview, because the client's own definitions of these terms may not match the interviewer's concepts. A client may state he/she has never been raped, but then report having been forced to engage in sexual intercourse; the client's idiosyncratic definition of the word, "rape," may include only forced sexual contact with strangers, violent assaults, or vaginal penetration. Men may assume that rape is something that only happens to women. Similarly, a client may deny a history of abuse, and then report severe beatings as child resulting in serious injury, because the client perceived this as discipline rather than abuse. Instead, the interviewer should inquire about a history of physical or sexual assault or abuse by using descriptions, such as "Have you been kicked, slapped, punched, pushed, or beaten," and "Have you ever had sexual contact when you didn't want to, because you were forced or coerced?" Then the interviewer can follow up any endorsements of these events to get specific details and evaluation of the events.

In addition to assault and abuse by others, clients may have experienced other traumatic events, such as natural disaster, fire, accident, combat, terrorism, or other violent crime. Clients may have witnessed traumatic events occur or happen to others, and experienced vicarious trauma as a result. It is also important to investigate how the client has dealt with any traumatic events in order to assess coping skills and resources. All of this information is clinically important.

Sample questions to ask:

- Have you ever been beaten, slapped, shoved, kicked, or punched?
- Have you had sexual activity when you didn't want to, because someone forced you, or you didn't think you could refuse?
- Have you experienced a disaster, accident, or serious injury?
- Did any of these things happen to someone you know, or did you see anything like this happening?

3.3.9 Substance Use History

While it may be argued that almost everyone has used some sort of psychoactive substance during their lifetime, it is important to determine a history of substance use and abuse. Substance-induced disorders should almost always be included in the interviewer's list of diagnostic hypotheses, because substances can mimic almost any other psychological disorder, and produce symptoms that are very similar to those of other disorders. When a person is brought to the emergency room in an agitated state, evidencing hallucinations, odd and rapid speech, it is difficult to differentiate among diagnostic hypotheses of manic episode, schizophrenic disorder, and amphetamine intoxication or psychosis. Inquiry about substances needs to include alcohol, prescriptions, over-the-counter medications, illegal, and unusual substances. Perhaps the most commonly used and abused substance is alcohol, according to the *Diagnostic and Statistical Manual of Mental Disorders* (APA, 2000). Since at least 90% of adults in the United States have some experience with alcohol, it is better to ask, "How much alcohol do you drink," rather than "Do you drink?" Similarly, the interviewer may ask, "What substances do you use," rather than "Do you use drugs?" Again, clients are likely to have different definitions of the terms, "substance," and "drugs," than the interviewer. Remember to ask about the use of tobacco and caffeine. A client complaining of anxiety symptoms may not realize a connection between those symptoms and drinking a pot or two of coffee every day.

Similarly, clients often supplement their treatment regimen with herbal remedies without understanding potential effects, mistakenly believing that anything "natural" must necessarily be benign. However, it is important to note that many herbal supplements have significant impact on the central nervous system and may result in symptoms of anxiety (e.g., ephedra), interact with prescribed medication (e.g., St. John's wort), or produce other effects (Spinella, 2005). Unfortunately, most clients are unlikely to spontaneously reveal their intake of herbal supplements, largely because they do not understand the effects. The interviewer is well-advised to specifically ask something akin to: "Are you currently using herbs or taking other alternative remedies?"

It is important to inquire about the age at which the client began using a substance, how much and how often, and under what circumstances. The impact of substance use must also be assessed in order to evaluate diagnostic hypotheses of substance dependence and substance abuse. Questions such as, "How old were you when you had your first drink of alcohol," "What's the most you consumed in a week," "How much do you drink, on average, now," "How long have you gone without a drink," "Do your family members or friends complain about your alcohol use," and "Have you ever had a hard time getting to work because you were hung over," may be used to evaluate alcohol use, and similar questions may be used to evaluate any other substances endorsed (Watson & Gross, 1998). When a client has used or abused multiple substances, it is important to determine their preferences. Most substances can be classified as stimulants or depressants, and users often have a preference for one over the other, and for one class of substances, like sedatives, over others with similar effects.

Sample questions to ask:

- How much alcohol do you drink, on average?
- What substances do you use?
- Have you ever used tobacco, cigarettes, cigars, or snuff?
- Are you taking vitamins, herbs, or food supplements?
- How old were you when you started?
- When did you use the most, and how much then?
- What's your drug of choice?
- How much coffee, tea, and caffeinated soda do you drink?
- Have there been periods of time you didn't use (substance)?
- Do other people complain about your use?
- Does it interfere with work or relationships?

3.3.10 Medical History

The interviewer may not need to generate a checklist of common childhood diseases or tabulate every cold or minor injury, but it is important to understand the client's health and history of significant illnesses or injuries. Some medical conditions can produce symptoms of psychological disturbances and disorders (APA, 2000), while health problems are psychosocial stressors that may influence the development of other disorders. The diagnosis of cancer, heart disease, or diabetes is likely to be upsetting to anyone; a history of brain injury may explain a client's memory lapse. The interviewer is not expected to diagnose medical conditions but is expected to gather information about the client's medical history to evaluate the context of the problem, strengths and challenges (Watson & Gross, 1998). General, questions about health concerns, "How would you describe your health now," "Have you had serious illnesses or injuries, been hospitalized, or had surgery?" can be followed by specific inquiry about illness and injury, "Have you ever had seizures, periods of high fever, been hit in the head and lost consciousness?" As with other areas of history, one must then determine when this illness or injury occurred, how long it lasted, whether or not it is ongoing, and what impact it had on client functioning.

Along with this identification of health problems, it's important to ask about treatments or interventions the client has received or pursued, and what sorts of health professionals have been involved in treatment efforts. Some clients rely on vitamins and food supplements or are reluctant to take prescription medications, while others seek advice and intervention only from traditional health practitioners and prescriptions. The interviewer can ask the client "Who is treating you for this condition," or "What treatment are you receiving for it?" One also needs to understand the perceived effectiveness or outcome of the treatment received, "How did that work for you?"

Sample questions to ask:

- How would you describe your health?
- Have you been diagnosed with a serious illness?
- Have you been in a medical hospital or had surgery?
- Any history of significant injuries, broken bones?
- How has this condition been treated?
- What was the outcome; was the treatment effective?

3.3.11 Technique

On occasion, the client's speech may become hesitant, he or she may begin to avoid eye contact, or some other indication may emerge to give the impression that the client is not providing the interviewer with a complete picture. This, of course, may spring from a variety of sources, such as an inability to recall certain details or an unwillingness to discuss particular events. In the latter case, a client may be encouraged by simply acknowledging the resistance and reaffirming the interview's goal with a statement such as "This may be a difficult topic for you to discuss. I appreciate all the information you can give me in order to help you." A statement such as this not only emphasizes the importance of gaining sufficient information to reach a reasonable conceptualization, but emphasizes understanding and empathy on the part of the interviewer and normalizes anxieties that the client may be feeling with regard to disclosure (Morrison, 1995).

Alternatively, much can be gained by simply easing the client into the topic, and this is particularly true with regard to asking about family history (Falk, 1998). Simply starting with a bluntly invasive question such as “Were you abused as a child?” may do little more than produce defensive silence. Beginning with such benign questions as “Where were you born?” and gradually increasing the sensitivity of the question, e.g., “Where were you raised?” “Did you like it there?” often aids in building rapport and decreases the defensiveness.

It is very rare for any of us to accurately recall all things at all times, so the client will likely experience some lapses of memory. This is to be expected and is not necessarily an indication of amnesia, cognitive difficulty, or resistance. Occasionally, however, a client may either refuse or be unable to recall any information to account for significant periods of time. Such amnestic events may warrant a referral for further evaluation. In addition, however, it is often prudent to explore the emotional meaning behind the memory lapse. Questions such as “What does that lapse of memory mean to you?” or “What do you think about not recalling things today?” may yield helpful information (Falk, 1998). In addition, if there appears to be some indication that the client is not being entirely truthful or has some extrinsic motivation to avoid disclosure, it may be helpful to explain confidentiality issues, the consequences of misleading the interviewer, or even to gently confront the client with questions about the accuracy of self-report. In some cases, the interviewer can gain more information by questioning until meeting resistance to disclosure, then switch topics and approach the information from a different perspective until again meeting resistance, and continue this process until a more complete perspective of the information is gained (Othmer & Othmer, 2002). One might use this technique when interviewing a client about alcohol use, for instance, and respond to protests that the client “is not an alcoholic” by inquiring about social activities, work, legal difficulties, and so on, asking about alcohol use and its consequences within in each topic area.

In contrast to not recalling sufficient information, some clients may be quite verbose, recounting events in grueling detail over an extended period of time. This is particularly true for clients who are experiencing an acute crisis (Falk, 1998). While the event that the client is describing is clearly important and needs to be thoroughly explored, a situation such as this often occurs at the detriment of exploring other important areas of the client’s life and problems. This can be minimized by gently redirecting the client with phrases such as, “That’s very important to know. I’d like to switch gears for a moment to get a well-rounded picture of you, so that I can help.” Sometimes simply reminding the client of time constraints and asking for their assistance to meet them will be helpful, such as “Okay, we only have about 15 minutes left, and I want to be sure I understand everything important to know about you today.”

3.4 Conclusion

At this point in the interview, examine the list of diagnostic hypotheses again. It is likely that enough information has been gathered to rule out many hypotheses on the list, and possibly to confirm a diagnosis. However, the interviewer should be wary of reaching a premature conclusion, and even new hypotheses can be generated during the assessment of social history. Important information will be gathered in the process of the Mental Status Examination (discussed thoroughly in Chapter 4 in this book) that will support or disconfirm diagnostic impressions. Before closing, the interviewing should consider what historical information would assist in ruling out or evaluating any of the diagnostic hypotheses still on the list. Then, one may ask about that information, even though it may appear to be off-topic, simply by saying, “I’m sorry, I forgot to ask you about something.” It is better to follow up on necessary diagnostic information during the interview than to write an interview report with several “rule-outs.” Scanning the list of diagnostic hypotheses and evaluating those diagnostic impressions before closing this part of the interview should help the interviewer feel more confident about the diagnosis.

Even with a thorough discussion of the client’s history, whether the information was gathered as a chronological account or by topic area, there may be important pieces of information left out. The interviewer may close this section of the interview by inquiring about anything else the client would like to convey about the presenting problem or history. The interviewer will often use an open question or comment about this, such as “What else should I know about you,” “Have we covered everything,” “What else do you want to tell me?”

3.5 Summary

Evaluating the presenting problem, history of presenting problem, and social history forms the bulk of the diagnostic interview. It may appear to be daunting, looking at the lengthy list of information to be included, yet in practice, it may often be completed in less than one hour. With practice, the interviewer will be able to guide the questioning through consideration of diagnostic hypotheses, directing inquiry to the areas of social history that will inform the differential diagnostic process, and allow for an accurate diagnostic impression by the end of the interview.

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Chapter 4
Mental Status Examination

Michael Daniel and Jessica Gurczynski

4.1 Introduction

The mental status examination (MSE) is an interview screening evaluation of all the important areas of a patient's current emotional and cognitive functioning, often augmented with some simple cognitive tests. The MSE provides the data for formulating a psychiatric diagnosis or developing a working hypothesis regarding psychiatric diagnosis. The MSE is to psychiatric diagnosis what the physical examination is to medical diagnosis (Scheiber, 2004; Robinson, 2001). The MSE also can be used as a basis for developing diagnosis of neurobehavioral disorders because of neurological damage, but this chapter will focus on the psychiatric application of the MSE. Interested readers are referred to Strub and Black's (2000) seminal work on use of the MSE for a neurologically oriented diagnosis.

The MSE is based on observations of the patient's nonverbal and verbal behavior and includes the patient's descriptions of her subjective experiences. Evaluation of a person's emotional and cognitive state by means of interview observations can be subjective. Subjective impressions can lead to an unreliable diagnosis. The purpose of the MSE is to provide a framework for the comprehensive evaluation of mental functioning that increases objectivity and reliability of the data and subsequent diagnosis. There is a high degree of similarity between various MSE formats presented in the literature, suggesting there is a relatively good consensus about what comprises a standard MSE. It is thus important to develop a standardized approach for conducting an MSE that includes assessment of the domains described below. A standardized approach increases reliability of the MSE – that is, the likelihood that the patient would be diagnosed the same way by another professional using an MSE (Daniel & Crider, 2003; Scheiber, 2004). A standardized approach facilitates communication about the patient and makes it easier to identify changes in the patient. It aids in assessing the severity of the patient's problems by establishing a standard of comparison across patients (Schogt & Rewilak, 2007).

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Another issue related to reliability of diagnosis is the importance of specifying the behavior on which key interpretations and conclusions are based. If you state the patient is guarded, hostile, anxious, or hallucinating, describe the behavior(s) you observed that led to the conclusion. These behaviors may be statements made by the patient (e.g., "I feel like I'm about to come out of my skin") or nonverbal behaviors (e.g., "the patient was restless, rapidly bouncing his leg up and down on the ball of his foot and often sitting forward on the edge of his chair"). Holding yourself to the standard of citing behavioral data to support your clinical interpretations will make your diagnosis more reliable and clearly communicate to other mental health professionals the data on which your impressions are based.

A standardized and comprehensive approach to the MSE must be balanced with the individualization necessary to set the patient at ease and develop rapport. The patient is most likely to feel at ease, and the clinician most likely to obtain valid data, if the MSE flows smoothly and has a conversational quality, especially at the beginning of the interview. Empathy is expressed by a genuine concern for the patient and the circumstances that have brought her to the MSE; an earnest attempt to obtain all pertinent information and understand its context, meaning, and implications for the patient will effectively convey the positive regard necessary to develop rapport, and is an effective way to collect comprehensive, reliable, and valid data. Developing rapport from the beginning of the MSE will increase the patient's comfort with, and likelihood of good effort on, more structured cognitive tests employed later in the MSE to assess specific cognitive abilities. In addition to rapport, environmental influences should be considered such as privacy and safety (Scheiber, 2004).

Finally, the MSE is one component of a comprehensive psychiatric evaluation. The information derived from an MSE offers a picture of the patient's functioning at that moment and reevaluation may be necessary if there is a change in the patient's condition (Shader, 2003). These data are most meaningful in the context of a thorough psychosocial and psychiatric history. The significance of ambiguous symptoms noted in the MSE often is much clearer when considered in light of the patterns of behavior evident in the patient's history. In addition, many symptoms that may represent psychiatric disturbance also can be caused by medical problems or medications. General knowledge of this overlapping etiology and accurate information about current medical status will prevent misdiagnosis that could have serious consequences.

4.2 Age and Cultural Considerations

Another important element of rapport and obtaining valid MSE results is awareness of the patient's cultural background. It is often necessary to modify the MSE to accommodate children, older adults, and those from various cultural backgrounds (Daniel & Carothers, 2007; Scheiber, 2004; Schogt & Rewilak, 2007; see Palmer, Fiorito, & Tagliareni, 2007 for information about MSE with children).

Sometimes it is necessary to speak more slowly and loudly when assessing elderly patients. It is not uncommon for elderly patients to become anxious if they know they are being evaluated for psychological purposes (Robinson, 2001; Schogt & Rewilak, 2007) and extra efforts may be required to help set the patient at ease. Elderly patients are more likely to have completed less education which can affect language ability. Elders may talk more than other patients as they have a great deal of life experience and stories they often like to share. They have a higher risk for depression and suicide and the majority of indicators of depression are similar to those of younger patients (i.e., decreased interest in activities, feelings of hopelessness, etc.). However, elderly patients tend to have more somatic complaints and physical symptoms are not as reliable an indicator of depression (Robinson, 2001). Aging affects performance on cognitive tests. Whereas verbal abilities and general fund of knowledge remain intact as an individual ages, speed, visual–spatial, and construction abilities decline with age (Daniel & Carothers, 2007).

Valid MSE of patients requires consideration of cultural factors (Daniel & Carothers, 2007). Cultural factors will influence the extent of eye contact, how appropriate individuals feel it is to reveal personal and family information, how emotionally expressive they are and their understanding of and response to cognitive tests. Developing a successful working relationship with a patient from a different culture will require modification of the MSE in a way that respects their cultural mores. In addition, behaviors and beliefs that often will be interpreted as likely signs of psychopathology in mainstream American culture may be common in sub- and non-American cultures. For instance, it is common in some cultures to believe that certain people possess special powers that enable them to place curses on others or enlist the power of spirits to manipulate others' actions. While these beliefs likely represent delusions in many patients, in some cases they may represent the person's acculturation. Nonnative English speaking status is a potential confound for all verbal aspects of the MSE, even for patients whose English appears fairly fluent.

There are various ways of organizing the domains assessed during an MSE and the domains will vary slightly according to the purpose (e.g., psychiatric vs. neurological) (Daniel & Carothers, 2007). We divide the MSE into three general domains as shown in Table 4.1.

Some mental functions can be included in more than one category (e.g., sometimes speech is as much reflective of a psychiatric process as it is a cognitive ability and behavior is as much a dimension of emotional functioning as physical).

Table 4.1 Domains of the mental status exam

Physical	Emotional	Cognitive
Appearance	Attitude	Orientation
Behavior	Mood and affect	Attention/concentration
Motor activity	Thought and perception	Speech and language
	Insight/judgment	Memory
		Intelligence/abstraction

We developed this scheme based on the type of data each area is intended to provide for a psychiatrically oriented MSE.

4.3 Physical

4.3.1 Appearance

Appearance is what the patient looks like. References on MSE encourage the examiner to paint a portrait (e.g., Schogt and Rewilak, 2007; Scheiber, 2004) with a description that captures unique features and affords the reader a clear mental image of the patient. Description of the patient's appearance documents an important element of the context in which other MSE data are obtained. Such documentation proves valuable if the patient is evaluated again in the future as it allows comparison and detection of any change in appearance that may be a manifestation of a change in psychiatric status. The person who, appropriately attired and groomed, was diagnosed with a depressive adjustment disorder 9 months ago but now appears disheveled and unshaven may not have availed himself of the recommended psychotherapy and deteriorated into a major depressive disorder or may have an undiagnosed dementia. Often, description of appearance merely will note there is nothing unusual and will not contribute to diagnosis.

Poor *grooming and hygiene* in the form of an unwashed/malodorous body, unwashed/unkempt hair, poor dental hygiene, and dirty fingernails often are signs of a psychiatric disorder such as schizophrenia or severe depression, brain dysfunction such as dementia, or the underprivilege of homelessness. However, body odor also is culturally determined as many non-American cultures bathe less frequently and have what Americans experience as pungent body odor. Unkempt or dirty *attire* or *dress* may be associated with the same conditions just described. Bizarre or outrageous attire may be an indication of mania, psychosis, or dementia. Seductive or lavish dress, jewelry, or makeup can reflect a histrionic or narcissistic personality style. Sloppy dress and unshaven appearance with adequate hygiene may indicate the patient has no interest in impressing the examiner or is resistant to seeing a clinician for MSE.

Essentially, all MSE references instruct the clinician to comment on *whether the patient appears their stated age*. Patients who appear younger than their chronological age are either genetically blessed or have had successful cosmetic rehabilitation; this generally does not have clinical significance, with the exception of when the latter is a manifestation of a clinical issue with body image. When patients appear older than their stated age it may be because of poor physical health, medical problems, alcohol or drug abuse, or a life of severe hardship such as homelessness. Severe or chronic psychiatric disturbance including depression, mania, and schizophrenia may also result in a prematurely aged appearance. *Facial expression* may convey information about mood. Decreased facial expression is common in schizophrenia and can be a side effect of antipsychotic medication. An expressionless or mask-like face is typical of Parkinson's and right hemisphere cerebral vascular accident (CVA). *Posture* also can convey information about the patient's emotional state at the moment or mood. Anxiety or resistance to the interview may be manifested in arms tightly crossed across the body. A "kicked back" posture may reflect general comfort with or indifference to the circumstances. Abrupt changes in posture, especially becoming more rigid, crossing arms, or turning away often indicate the patient is having an emotional reaction to or at least is uncomfortable with the topic at hand. *Scars* may represent previous suicide gestures and *tattoos* gang affiliation. If the nature of an unusual physical feature is unclear, it is preferable to inquire about it rather than to ignore it out of concern for social grace.

Eye contact may reflect various features of emotional functioning. Little eye contact with the examiner and down turned gaze may reflect depression, anxiety, awkwardness, or low self-esteem. Glaring may signal hostility. As with many elements of social interaction, eye contact is culturally determined and it is considered rude to make direct eye contact in certain situations in some cultures. Indeed, it is important to determine if this is the case especially for patients of non-Western cultures.

Any distinctive or unusual features should be noted including weight, height, physical disability, sweating, and signs of intoxication such as conjunctivitis, narrowed eyelids, and dilated pupils. Akiskal and Akiskal's (1994, p. 28) excellent examples of how appearance may contribute to the MSE diagnostic picture are excerpted below:

> This 20-year-old, self-referred single, Chinese-American student was interviewed in the student counseling center. She is a petite, frail-looking woman appearing much younger than her stated age. She wore no makeup, and was dressed in simple attire consisting of a blue button-down boy's shirt, a pair of cutoff blue jeans, woolen knee stockings, and penny loafers. She carried a knapsack full of books that she held closely on her lap. Throughout the interview, her hands were tightly clasped around her knapsack. Her fingernails were bitten down to the quick.

The description of this patient's appearance gives us clues about a moderate level of anxiety and tension, clues that should be pursued during the remainder of the examination. The next example illustrates a more disturbed patient.

> This divorced white woman was brought to the county mental health center by her distraught son and daughter-in-law because she had become increasingly hostile and combative at home and was staying up all night. She was restless during the interview, rising frequently from her chair, looking at every diploma on the walls, making comments about each of them, doing essentially all the talking during the interview. She looked her stated age of 53, but her clothes would have been appropriate only for a much younger person. Although quite obese, she wore orange "hot pants" and a halter top that showed a bare midriff. Her legs had prominent varicose veins. She wore old wooden beach sandals with high spike heels. Her general level of grooming was very poor: Her short gray hair was matted on both sides of an irregular part. Her fingernails were long and yellowed from nicotine; her toenails were also very long, each painted a different color.

The general appearance of this patient suggests a psychotic level of disorder and raises hypotheses of much different nature from those generated by the first patient, necessitating further inquiry along the lines of a manic disorder.

The general appearance of the third patient suggests entirely different diagnostic possibilities.

> A 25-year-old single white engineer was seen in a private office. He was impeccably dressed in a three-piece gray pinstripe suit and matching dress shoes. His hair and mustache were carefully groomed. The secretary noted that when he signed his name on the admission form, his hands were visibly tremulous. He generally appeared uneasy and glanced furtively about the room, paying special attention to electrical outlets, air-conditioning vents, and, most especially, the security camera.

Inquiry along the lines of a delusional disorder is suggested by this patient's general appearance, and differential diagnosis should consider such conditions as amphetamine psychosis and paranoid schizophrenia.

4.3.2 Behavior

Behavior is how the patient acts. Of course, everything assessed in an MSE is behavior of some type; whether motor, verbal, or affect, it all is behavior. This section refers to the more general qualities of behavior not subsumed under other sections. Behavior is observed throughout the MSE. As noted above for posture, any abrupt or notable change in demeanor may indicate the patient is uncomfortable with or threatened by the topic at hand. As with appearance, the MSE description of behavior may merely note there was nothing unusual and will not contribute to diagnosis.

Many MSE references include level of consciousness under the topic of behavior. Normal consciousness is in evidence when the patient is alert, normally aware of internal and external stimuli (Strub & Black, 2000), and responds generally appropriately to the interview. Low level of consciousness is manifest in decreased alertness and arousal and the patient may appear lethargic. At more extreme low levels of consciousness, the person is described as obtunded or stuporous (Strub & Black, 2000). Low levels of arousal almost always are because of physiological or other acute medical problems and are referred to as an *acute confusional state* or *delirium*. These patients are often inattentive and their conversations are inconsistent and confabulatory (Daniel & Carothers, 2007). Causes include toxic or idiosyncratic drug reactions, sedative-hypnotic use, infection, metabolic abnormality, or systemic failure (e.g., cardiac, respiratory, renal). Delirium can also occur with the onset of an acute brain event such as CVA. It can occur among older adults with most any kind of medical challenge. It is common postoperatively, especially in older adults who have some pulmonary compromise (e.g., smoke cigarettes, emphysema, asthma). Generally, the most reliable clinical feature distinguishing delirium from other types of brain dysfunction (e.g., dementia) and psychiatric disturbance is general impairment of alertness or "clouding of consciousness." Fluctuations in level of consciousness, variable alertness, and incoherent answers are qualities of delirium (Strub & Black, 2000).

At the opposite end of the arousal continuum is *hypervigilance*. Hypervigilant patients may restlessly scan the room and attend to every discernible sound and change in visual stimuli; they may be easily startled. *Hyperarousal* is typical of anxiety, mania, and paranoia as well as some medical conditions such as hyperthyroidism. It may also be the effect of acute substance abuse (Morrison, 2008).

Morrison (2008) defines *mannerisms* as unnecessary behaviors that are part of a goal-directed activity. They are at least unique, and often are atypical actions such as always rubbing the back of one's head before speaking. Many people with substantially below average intelligence have stereotyped mannerisms. Alone, mannerisms usually are not specifically diagnostic; the significance of mannerisms is determined by considering them in conjunction with other MSE findings. *Compulsions* are an extreme form of mannerisms; they are stereotyped, often ritualistic, and trivial. Compulsions almost always parallel obsessive thoughts. They can take many forms including repeatedly saying a phrase before responding or doing some repetitive act like washing hands or turning a light switch on and off. Morrison (2008) suggests asking patients: "Have you ever had thoughts that seem senseless to you, but keep coming back anyways?" and "Have you ever had … rituals or routines that you feel you must perform over and over, even though you try to resist?" (p. 129). If patients respond affirmatively or the clinician observes any unusual or repetitive behavior suggestive of compulsions, follow up questions include, "are you aware of the behavior?," "in what circumstances does the behavior occur?," and "would you like to stop the behavior but are unable to?" If the answer to all these questions is yes, the behavior very likely is a compulsion and further similar inquiry for obsessions is indicated. In addition to obsessive–compulsive disorder, compulsions also occur in Tourette's syndrome. If the patient is not aware of the behavior in question or it is accompanied by an altered level of consciousness (i.e., delirium), then it is unlikely a compulsion.

4.3.3 Motor Activity

Motor activity is the type and quality of movements the patient makes. The patient may sit quietly, have no abnormal movements, and move normally. Abnormal movement is broadly divided into the dichotomy of those that are part of a psychiatric disturbance and those that are because of neurological dysfunction. Astute observation of motor activity can play an important role in the differential diagnosis of psychological and neurological disorders (Daniel & Carothers, 2007).

Decreased level of motor activity is *psychomotor retardation* and often is associated with psychological conditions such as severe depression, schizophrenia, and narcolepsy (Robinson, 2001). Decreased motor activity because of neurological cause is referred to as *akinesia* (absence of movement), *hypokinesia* (decreased movement), or *bradykinesia* (slowed movement); these terms and psychomotor retardation often are used synonymously. Subcortical disorders such as Parkinson's disease, Huntington's disease, progressive supranuclear palsy, and AIDS related brain deterioration all result in decreased motor activity. In Parkinson's, the patient frequently also has tremor (described below) as well as rigid posture, problems initiating movements (e.g., getting up from chair and taking the first step when walking) and short-stepped gait. Observations of these other motor qualities will aid in discriminating psychomotor retardation because of psychological vs.

neurological cause. *Catatonia* is an extreme form of psychomotor retardation typically seen in schizophrenia. The catatonic patient will remain immobile for prolonged periods of time despite prompts or circumstances that will elicit responses in patients with other psychiatric disorders. *Catalepsy* or *posturing* is immobility that involves assuming a (often unusual) posture for prolonged periods; sometimes the patient is rigid in this posture. In *waxy flexibility*, the patient's posture can be changed by someone else, but is maintained in whatever position the patient is left, even if it is odd.

Paresis and *plegia* are decreased motor movement because of loss of strength resulting from neurological damage. CVA, traumatic brain injury, and spinal cord injury are common causes. Paralysis of a body part also occurs in conversion disorders. Neurological vs. psychological etiology of paresis usually is determined by anatomical inconsistencies in the presentation of paralysis and evidence in the history suggesting likely functional basis for the symptom. Muscle weakness (not referred to as paresis or plegia) is a primary symptom of neurological disorders such as multiple sclerosis, Guillian-Barre, and myasthenia gravis.

As the foregoing makes clear, it is important to carefully observe and describe the quality of decreased movement to distinguish psychological and neurological causes. In most cases, medical causes of movement disorders are documented by the time MSE is conducted with the patient, although there may be those rare occasions when a neurological problem has been unrecognized prior to MSE.

More common in mental health patients is increased motor activity or *psychomotor agitation* (Morrison, 2008). Obvious active motor signs of emotional states are hand wringing, nail biting, or pacing, all of which may reflect anxiety. It is associated with agitated depression, mania and can occur in delirium (Morrison, 2008). It also can be a byproduct of stimulant drug use.

Whereas psychomotor agitation as defined above is not a common symptom of neurological disease, there are many neurological conditions that produce abnormal involuntary movements. *Akathisia* is increased motor activity such as fidgeting, rocking, and pacing that is typically the result of antipsychotic medication (Robinson, 2001). *Tardive dyskinesia* exclusively affects psychiatric patients and results from long-term use of antidopaminergic neuroleptic medication. Tardive dyskinesia most commonly affects the muscles of the face, especially the lips and mouth and appears as a writhing or tic-like (see below) movement. *Tremors* are oscillating movements that occur in a relatively consistent rhythm, often occurring in distal body parts such as the hands; tremor can become more pronounced with stress and can be temporarily controlled volitionally (Cummings & Mega, 2003). Resting tremors are common in Parkinson's while intention tremors (i.e., with movement) can occur with cerebellum damage. Some older people have tremor as a result of nonspecific infirmities of age. *Tics* are involuntary movements or vocalizations that range from simple to complex including blinking, facial grimacing, neck jerks, shoulder shrugging, and throat clearing; they are associated with obsessive–compulsive disorder and stimulant use (Robinson, 2001). Multiple types of motor and vocal tics wax and wane over time in individuals with Tourette's syndrome (Cummings & Mega, 2003). Many people who are mentally and emotionally healthy have tics, so their significance is determined by the overall findings of the MSE. Patients who experience tics may not express them during the MSE as they typically occur in response to increased discomfort or distress (Robinson, 2001). *Choreiform* movements are a wide variety of involuntary movements that have a rapid, highly complex, and jerky quality, and they are typical of Huntington's disease. Often people with choreiform movement disorders are skillful at "finishing" the involuntary movement to make it look intentional and functional, and thus disguise its involuntary nature.

4.4 Emotional

4.4.1 Attitude

Attitude is how patients feel and what they think about participating in the MSE. Attitude is inferred from the patient's behavior, including characteristics described above such as facial expression, posture, and eye contact. Other behavioral indicators of attitude are voice tone, how completely or evasively the patient answers questions, and their attentiveness and responsiveness to questions (Schogt & Rewilak, 2007). A patient's attitude may change during the MSE depending on the topic at hand and it is important to take note of these shifts (Carlat, 2005; Scheiber, 2004). Many patients will participate willingly in the MSE and are usually described as *cooperative, friendly, responsive, and/or open*.

Other patients, however, are not willing participants in the MSE. Attitude is important because if the patient is not sufficiently cooperative, the MSE will not produce valid results. If it appears at the outset that the patient is not willing to engage in the MSE in a productive manner or the patient's attitude changes notably in the course of the MSE, it probably is best to empathically mention your observations, attempt to find out how the person is feeling and if anything can be done to enlist their cooperation. "You seem upset by/uneasy with this whole thing/what we're talking about now." Allow the patient to confirm or disconfirm. "I was wondering what makes you feel that way?" Allow the patient to respond. "What would make you feel better about talking to me/talking about this?" If it is not clear whether the patient is open and truthful in their responses, you can ask them a question about a potentially delicate topic to which you already know the answer. Comparison of their response with collateral information will give some indication of their frankness and may also give you the patient's unique perspective that was not available in other accounts.

Patients may be *guarded or suspicious*: reluctant to answer questions for fear the information they provide will be the basis for bias against them in the hospital, clinic, or by the doctor. Other patients may be *hostile* because they are angry about whatever circumstances led to their referral for an MSE; often they believe they have no problems and view their referral for an MSE as part of a malicious plot against them or the failure of others to understand their circumstances. *Passive* patients will not volunteer information; when asked, their answers are incomplete and unelaborated.

The patient's attitude may shed light on psychopathology. A patient high in psychopathy may be socially skilled and charming but evade giving full or truthful answers to avoid revealing illicit activities. Patients with histrionic personality disorder may be seductive in an effort to manipulate the examiner. Patients with a borderline personality disorder may have difficulty with the ambiguity of simultaneous positive and negative feeling toward a person and so can vacillate between extremes of very positive and very negative feelings for the examiner. This may lead to the patient suddenly and unexpectedly directing anger toward the examiner because the examiner will not grant some request or endorse some point of view favored by the patient. This can be followed by just as abrupt an expression of admiration and affection by the patient for the examiner.

Other attitude characterizations include *childlike*, *argumentative, resistant, dramatic* (Amchin, 1991) and *flippant, threatening, impatient, preoccupied, sarcastic*, *arrogant* (Trzepacz & Baker, 1993). It is important to specify the behaviors on which a pejorative attitude attribution is based.

4.4.2 Mood and Affect

Affect and mood disturbance are the central features of many common psychiatric disorders. While definitions vary somewhat, in general *mood* is considered the internal emotional state of the patient and *affect* is the external expression of emotional state. Normally, there is high concordance between mood and affect; however, they may be discordant in patients with psychiatric disorders. Generally, mood is considered more stable, changing over days and weeks, whereas affect may change moment to moment and is more influenced by context.

Since mood is the subjective experience of the patient, many authors recommend using the patient's self-report to characterize mood (Daniel & Carothers, 2007; Robinson, 2001; Shader, 2003), and quoting the patient's statements about their mood is a good way of documenting it. Others suggest that in addition to the patient's self-report, the clinician describes the patient's mood based on clinical impressions. Discrepancies between the patient and clinician's formulation may indicate the patient has decreased awareness of their mood suggesting the possibility of poor awareness of emotional state or denial. Whether the patient's mood is judged "abnormal" is determined by the degree to which it appears to match present life circumstances. It is important to discuss the patient's mood in an empathetic manner, communicating genuine concern if they are experiencing emotional pain.

We modify Robinson's (2001) model and characterize mood in six categories (see Table 4.2).

Euthymic is essentially normal mood without pathology. Unfortunately, many non-mental health professionals who read MSE reports do not know what this word means.

Table 4.2 Mood categorizations

Euthymic	Angry/irritable
Dysphoric	Apprehensive
Euphoric	Apathetic[a]

Based on material from Robinson (2001)
[a]Our addition

Dysphoric mood is sad and depressed. It is one of the most common moods in patients referred for an MSE and the hallmark feature of depressive disorders. According to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association, 2000), it also occurs with many other psychiatric disturbances, including bipolar disorders, psychosis, anxiety disorders, personality disorders, and substance induced states. Many patients with medical problems have dysphoric mood as a direct effect of or reaction to their condition. In addition, sadness and grief are a normal response to substantial loss or trauma. *Euphoria* is at the opposite end of the mood continuum and is typified by extreme and excessive happiness and elation. Most common in manic disorders, it also can occur in schizophrenia and substance induced states (American Psychiatric Association, 2000). *Angry* or *irritable* mood often is manifested in antagonism, belligerence, confrontation, and opposition. It is seen in patients with mania who are not euphoric, depressives who are not merely sad, and can be the result of substance induced states. Often it is a consequence of dementia and other brain dysfunction, especially in the prefrontal lobes. Patients with borderline, antisocial, and narcissistic personality disorders express poorly regulated anger when their demands are not met or limits are set on their behavior. Of course, when a patient is angry it is always important to assess their potential for violence and the clinician's safety. *Apprehensive* mood is distinguished by worry, dread, and fear. It is common in anxiety disorders and sometimes is present in depression and paranoid states. *Panic*, an extreme form of apprehension, usually is accompanied by pronounced autonomic nervous system symptoms such as palpitations, hyperventilation, sweating, and sometimes chest pains; as a result, panic frequently is associated with fear of imminent death. Anxiety is a direct symptom of some medical problems, such as hyperthyroidism. Patients who suffer respiratory compromise often become very apprehensive because severe symptoms can make the person feel like he is dying. *Apathetic* mood is characterized by disinterest and detachment. Apathy can occur as an acute reaction to severe trauma or emotional shock. It also is associated with severe forms of psychosis such as catatonia and can be a symptom of conversion disorder. Brain dysfunction in the prefrontal – basal ganglia circuit can cause apathy (Trzepacz & Baker, 1993).

Assessment of affect is based on the clinician's observations of the patient's behavior, some of which were discussed above. Obvious characteristics such as crying, laughing, shouting, and startling as well as more subtle qualities such as facial expression, voice tone, and body posture are the behavioral data that define affect. Therefore, it is important to reference the behavioral observations on which the

Table 4.3 Characteristics of affect: modified from Trzepacz and Baker (1993)

Quality of affect	Normal	Abnormal
Appropriateness	Congruent with context	Incongruent with context
Range/variability	Full, Shows change	Restricted Constricted Labile
Intensity	Strength of emotional response typical for social interactions Animated	Flat Blunted Exaggerated
Responsiveness	Reacts emotionally to changes in context	Nonreactive Unresponsive Extreme reactions

clinical judgment of affect is based (Table 4.3). For example, "Affect was anxious as evidenced by rapid sometimes stammering speech, biting the inside of his lip, near constant shifting in the chair and visible perspiration stains on the underarms of his shirt."

Appropriateness is how well the patient's affect matches the circumstances and topic of discussion. Affect is *congruent* if emotional expression matches patients' description of their mood and other verbalizations, for example, acting sad or being tearful when describing recent loss or trauma or acting anxious when discussing a planned potentially painful medical procedure. Affect is *incongruent* when it does not match reported mood or verbalizations, for example, matter of factly discussing recent significant loss, demonstrating great anger about an inconsequential slight, or laughing when nothing humorous occurred or was said; the first is common among histrionic patients, the second among borderline personalities, and the last among people with schizophrenia. It is important to consider culture when judging the appropriateness of affect as some nondominant cultural groups show more or less affect in a situation than dominant cultural groups (Morrison, 2008).

Range or *variability* is the breadth of emotional expression demonstrated. Normally, affective range varies in the course of a social interaction depending on the topic and idiosyncratic feelings about it. Affective variability can be abnormal in both directions from the normal median. At one extreme, the patient who shows little or no variation in emotional expression despite changes in circumstances has *restricted* or *constricted* affect. Affect may be restricted to any part of the continuum. For example, the patient who is only ebullient has restricted range just as someone who is only sad. Depressed and schizophrenic patients often have restricted affective range, as do some patients with right CVA and many with prefrontal brain injury. At the other end of the continuum is a capricious and often rapid change in emotional expression referred to as *labile*. Labile patients suddenly burst into tears or burst into laughter and regain control with effort, only to repeatedly burst into tears or laughter again. Lability is common among right CVA patients and can occur in schizophrenia.

Intensity is the strength of emotional response. Normal intensity is defined in both normative and contextual terms: that is, how strongly would the average person respond in this situation. In most situations, normal intensity is referred to as *animated*. Intensity can be abnormal in both directions from the normal median. At one extreme, the patient shows little or no animation in emotional expression and has *blunted* or *flat* affect. This is common in severely depressed and schizophrenic patients as well as in patients with prefrontal lobe damage, Parkinson's and right CVA. *Exaggerated* affect is at the other extreme and is an unusually strong emotional response; histrionic and borderline personalities often have exaggerated affect.

Responsiveness is the degree to which the patient responds emotionally to things people usually respond to. Normally, people will respond to emotionally laden topics. The patient may be *nonreactive* or *unresponsive* in an indifferent manner such as seen in histrionic personalities, or they may be unresponsive in a constricted manner characteristic of schizophrenia. The patient's responsiveness is *extreme* when his emotions are notably more intense than normal.

4.4.3 Speech and Language

Language is the use of symbols to communicate. Speech, one of four general modes of language, is what the patient says and the quality of how she talks. Before speech can be considered an indication of psychiatric functioning, it must be first established that there is no language impairment because of brain dysfunction. For most patients, it will be clear from the outset that there is no language deficit because their responses to questions reflect comprehension and they are able to express ideas adequately in speech. For these patients, speech and language is normal, no further evaluation of these abilities is necessary and speech can be considered a reliable reflection of thought and perception (discussed below). However, when there is some abnormality of speech or it is not clear the patient reliably comprehends what is said, it is necessary to further assess language in an effort to determine if these problems are because of psychiatric disturbance, brain damage, or both. Although thought disorder and language impairment usually occur independently, there are similarities in the speech anomalies seen in brain damage and psychosis; typically, the presence/absence of associated symptoms allows differential diagnosis (Schogt & Rewilak, 2007). If brain damage is suspected, medical concerns are referred for neurological and cognitive issues for neuropsychological or speech pathology consultation.

Only a brief overview of language functioning is possible here; refer to Strub and Black (2000) for a more detailed description of language. From a cognitive perspective, language generally is divided into four domains as illustrated in Table 4.4.

Aphasia is impairment of language because of brain damage and is broadly classified into two general syndromes: nonfluent, mostly associated with frontal brain damage, and fluent, mostly associated with temporal-parietal damage. *Nonfluent aphasia* is characterized by slow, labored, halting speech with particular difficulty saying function words (e.g., a, the, in, about). Nonfluent aphasics mostly

Table 4.4 Broad domains of language

	Receptive	Expressive
Auditory	Auditory–verbal comprehension	Speech
Visual	Reading	Writing

produce content words, primarily nouns, but also some verbs, adjectives, and adverbs. Auditory–verbal comprehension is less affected, but often there are comprehension deficits for statements when the grammatical structure is important in conveying the meaning (e.g., distinguishing between "the child called for her mother" and "the mother called for her child" and "the mother was called by her child"). *Fluent aphasia* is characterized by impaired auditory–verbal comprehension and speech that generally is normal in rhythm, intonation, and quantity, but is a meaningless mix of nonsense words (*neologisms* or *jargon*) and real words. For the most part, nonfluent aphasics are aware of their language deficits while fluent aphasics are not. Reading and writing deficits are associated with fluent and nonfluent aphasia. *Dysnomia*, or word retrieval deficits, is a common symptom of most aphasia syndromes. When CVA is the cause of aphasia it often produces symptoms of both syndromes; aphasia also can result from head injury and dementia. Speech deficits will be, for the most part, apparent in conversation. If it appears the patient is experiencing subtle word finding problems unrelated to psychiatric disturbance, a referral for neuropsychological or speech pathology evaluation is indicated. If the patient gives unreliable or incoherent answers to questions, comprehension may be at issue and can be tested at a basic level. Place three or four common items in front of the patient (e.g., pen, cup, book, key) and say "I want to make sure you can understand what I'm saying so I'm going to ask you to do some things with these objects on the table. Point to the ____," completing the statement with each item in turn. If the patient is successful at this level then give three to four instructions that include two or more objects: e.g., "put the pen in the cup…put the key on top of the book…put the cup between the pen and key." You can also use prompts such as "show me the one you use to unlock a door." Anything other than perfect performance indicates the patient is not reliably processing language and it is important to determine if it represents a neurological or psychiatric problem. The patient who passes this simple comprehension screening but still appears to have comprehension deficits that appear unrelated to psychiatric disturbance should be referred for more comprehensive evaluation. *Dysarthria* is distorted pronunciation because of impaired neuromuscular control of oral–facial muscles and results from a number of developmental disorders and acquired brain injury.

From a psychiatric perspective, features of speech such as the *rate*, *intonation*, *latency*, *spontaneity*, *articulation*, and *volume* may be relevant. Manic patients often will interrupt or respond without pause with rapid, pressured speech that parallels racing thoughts. Significantly depressed patients will have slow speech of low volume, little variation in intonation, increased response latencies and no initiation; the speech of some schizophrenics will have the same qualities, but often will have bizarre content (discussed below). Although slurred speech often is the result of intoxication, the possibility of an acute neurological event must be considered. *Mutism* is the complete absence of speech. It can occur after brain injury, but it is relatively rare and is mostly associated with focal lesion of the anterior cingulate. Psychiatrically, mutism may occur in catatonia and should be distinguished from “loss of voice” because of conversion disorder; the latter is distinguished by accurately mouthing words and ability to communicate adequately in other verbal and nonverbal forms, although it is important to rule out medical pathology in these cases.

Clinically, the most difficult distinction to make is between fluent aphasia and the bizarre speech of schizophrenia. The disturbed speech of a person with schizophrenia may contain confused, fragmented utterances with nonsense “made up” words similar to that which occurs in fluent aphasia. However, schizophrenics often will vary between coherent statements, especially in response to structured questions, and confused speech; this type of variation is less common in fluent aphasia where the nonsensical quality of speech is consistent. Syntax usually is preserved in thought disorder but not in fluent aphasia (Trzepacz & Baker, 1993). In addition, a schizophrenic’s speech abnormalities are more likely to be accompanied by delusions, hallucinations, and affective disturbance, symptoms uncommon among fluent aphasics. Unless severely psychotic, patients with thought disturbance can read aloud, write to simple dictation and copy from written material while patients with fluent aphasia will show impairments in these areas that parallel their speech. Even incoherent schizophrenics typically can follow simple instructions, name objects, and repeat simple phrases, abilities impaired in fluent aphasia (Trzepacz & Baker, 1993).

4.4.4 Thought and Perception

Thought is the internal dialog that occurs in the patient’s mind. *Perception* is the patient’s sensory-perceptual experience and interpretation of external events and circumstances (Robinson, 2001). Since thought and perception are internal, they are inferred almost completely from what the patient says (thus the importance of first ruling out neurologically based language impairment). While in some situations, it is to an extent possible to infer thought and perception from the patient’s behavior (e.g., if they attend or respond to auditory hallucinations), it is not possible to assess thought and perception if the patient does not express herself through speech, writing, or sign language. Patients who have otherwise significant psychological problems (e.g., mood disturbance), and those that have none, will have logical goal-directed thoughts in adequate quantity, express them in an organized fashion and will interpret events in a realistic manner. These patients have no thought or perception disorder. Most often, thought and perception disturbance is the hallmark of psychosis, although it can be present in severe mania and depression.

Most references on MSE distinguish two aspects of thought: process and content. *Thought process* is the formulation, flow, and organization of thought

(Robinson, 2001). Although sometimes it is unclear if a patient's thought process is "normal," there are certain types of thought processes that are considered disordered (Daniel & Carothers, 2007). *Circumstantiality* is the mildest form of thought disorder (and a personal style of many otherwise normal people). Responses are over-elaborative, include much more detail than necessary but eventually get to the point and ultimately are relevant. For example, when asked what resulted in his current admission, the circumstantial patient may begin with a detailed description of a conflict 10 years ago with his mother "where it all began" and give excruciating detail of ensuing events. Circumstantiality may reflect normal conversation style, obsessive thinking, anxiety, or below average intelligence and is described clinically in patients who have dementia and temporal lobe epilepsy (Carlat, 2005; Robinson, 2001). *Tangentiality* is a train of thought that strays from the original topic and never returns; the thoughts generally are logical, but digress from the target and at best are minimally relevant. Tangentiality is not diagnostic of psychiatric disturbance in and of itself. *Flight of ideas* is the repeated rapid successive change from one idea to another associated idea. Ideas typically are logical and the association between them clear; however, in severe cases neither may be discernable. In mania, flight of ideas is manifest in pressured speech. *Loose associations*, also called thought derailment, are thoughts without logical basis or based on obscure or bizarre logic (Robinson, 2001). Shader (2003) noted that loosening of associations may be obscured in a completely structured MSE interview, so it is useful to include some open-ended questions and unstructured conversation to allow opportunity for loose associations to emerge. *Word salad* is the most extreme form of thought process disturbance in which even the logical association between words is lost and the patient's speech is a jumble of meaningless words and nonsense words. Most often a sign of schizophrenia, word salad must be distinguished from fluent aphasia (see Sect. 4.4.3).

Other types of thought disturbance include *thought blocking*, which is losing track of a thought before it is completely expressed and is manifest in a mid-sentence pause; if speech resumes the topic has changed. If asked, the patient usually does not remember what they were thinking/talking about prior to speech arrest. *Perseveration* is the repetition of a word, phrase, or idea resulting from failure to properly inhibit and cease a response when it no longer is appropriate. At extreme levels, the patient may repeat the same word or phrase in a mechanical and rote manner, relevant or not, regardless of redirecting prompts; this typically occurs in psychotic and severely brain damaged patients. At a less severe level, the patient may perseverate on a topic or idea that continually intrudes despite change of topic; this may be associated with psychosis or obsessive–compulsive disorder. *Clang associations* are productions of words or phrases based on rhyming sound; for example, the patient may say "My pants are too loose. You must be Toulouse Lautrec. I think I've seen you on Star Trek." *Neologisms* are made up words. The patient may say "They stole my ferckle and I need it to especialate." Neologisms are common in fluent aphasia and need to be distinguished from schizophrenia (see Sect. 4.4.3). Patients who extensively or only repeat what they hear the clinician say have *echolalia*. This also can occur in aphasia and dementia and should be distinguished from psychosis (Robinson, 2001). For the most part, the thought disorders in this paragraph are relatively rare (American Psychiatric Association, 2000).

Thought content is what the patient thinks about, as reflected in what they talk about. *Obsessions* are persistent ideas, thoughts, impulses, or images that are experienced as intrusive and inappropriate and that cause significant anxiety or distress (American Psychiatric Association, 2000). The thought is disturbing to the patient who has insight that it is irrational. In the MSE, *preoccupations* often are an indication of an underlying obsession and are manifest in continually revisiting a topic. The best way to find out if a patient is experiencing obsessions is to ask about it. If she is, follow up with specific inquiry about content, frequency, accompanying feelings, and associated actions. *Phobia* is fear of an object or situation that in fact is not threatening. Phobic patients usually recognize the irrationality of their fears. We will briefly discuss three types of phobias: agoraphobia, social phobia, and specific phobia. *Agoraphobia* is fear of open and/or public places and often results in the patient restricting herself to home. *Panic attacks* frequently accompany agoraphobia; they are characterized by autonomic nervous system symptoms such as sweating, hyperventilation, and rapid heart rate, often giving rise to a feeling of impending death. *Social phobia* is a fear of public humiliation or embarrassment that is so severe it interferes with the patient's social or occupational functioning. *Specific phobia* is inordinate fear of a specific object or situation, such as spiders, heights, or flying. Specific phobias in and of themselves are not indicative of significant psychopathology, but can substantially disrupt the patient's life when the associated avoidance interferes with functioning (American Psychiatric Association, 2000).

Of course, it is very important to evaluate *suicidal* and *homicidal ideation* since this represents one of the major areas of risk for the patient and others, as well as liability for the clinician. It should be routinely documented in the MSE report whether present or absent. If the patient acknowledges suicidal ideation, distinguish between passive thoughts/desire to die vs. intention to actively end life. Ask if the patient has a plan, what the plan is (noting the extent of detail), if they have the means to execute the plan (e.g., access to weapons or potentially lethal medication) and whether the patient has done anything to execute the plan. Other risk factors for suicide that should be assessed are past suicide attempts, attempts by family or friends, and alcohol abuse. Chronically depressed and schizophrenic patients are most likely to commit suicide (Carlson, 2007), but any patient with intent is at risk. Homicidal ideation or thoughts of just assaulting someone can be assessed with essentially the same approach. Distinguish between passive thought and active intent. Inquire about plans, means, degree of execution of plan, and past/family history of violence. Psychopathic personalities are the most likely to plan violence.

Perception is the patient's interpretation of external events and circumstances; delusions are impairments in this interpretation. *Delusions* are "a fixed, false belief that the patient's culture and education cannot account for" (Morrison, 2008, p.132). Delusions range from plausible (the police are following me) to bizarre (my neighbor's Christmas lights are arranged in code to communicate with aliens). They also vary in their organization. Some delusional systems are stable – i.e., change little over time – and systematized – i.e., the various features of the delusions are interrelated. Unstable and nonsystematized delusions change frequently with little connection between various features. Cultural factors are pertinent (see Sect. 4.2). *Paranoid* delusions, especially *persecutory* ones, are the most common in general psychiatric populations (Robinson, 2001). Persecutory delusions are irrational beliefs that one is the victim or target of harm or threat (e.g., my neighbor sends signals through her sewing machine to my mind) and are seen in schizophrenics as well as people with delirium, dementia, and temporal lobe epilepsy (Cummings & Mega, 2003). *Grandiose* delusions are of exceptional skills, status, or position. These patients may claim to have great wealth, exclusive knowledge/ability or to be confidants of prominent people and are most common in mania. *Somatic* delusions are of physical symptoms and medical problems (e.g., there are worms eating my insides). In less severe forms, these delusions are plausible symptoms and it is important to rule out veridical medical pathology. Somatic delusions occur in schizophrenia, brief reactive psychosis, severe depression, mania, dementia, and delirium (Robinson, 2001). *Ideas of reference* are delusions that some unrelated thing has special and specific reference to the patient. Media often is the focus of ideas of reference: e.g., "the news reporter was talking about me on television when she did that story about…" or "when they put the flag at half mast that meant I was only going to work for another 2 weeks." Other forms of delusions are: *erotomania* – belief someone else, usually famous, is in love with me; *delusional jealousy* – unfounded and consuming belief that one's partner is unfaithful; *nihilistic delusions* – belief of some impending or already occurred doom. Some authors refer to *irrational beliefs* that are illogical, but not quiet bad enough to be delusional: for instance, believing that cheating on income taxes resulted in physical illness. *Magical thinking* also refers to the belief that there is connection between events when none actually exists.

A *hallucination* is an impairment of sensory experience in which the patient has a perception that is internally generated and not the result of sensory input from the environment (i.e., hears, sees, feels, smells something that actually is not there). *Auditory hallucinations* are the most common in psychiatric patients, especially schizophrenia, and usually consist of hearing voices. They may hear a voice calling their name or saying insulting, critical, derogatory things about the patient. If the voices give instructions they are called *command auditory hallucinations* and it is important to determine if the patient has acted or feels compelled to act on them. Unformed sounds such as ringing and buzzing are more likely to be related to neurological dysfunction. *Visual hallucinations* can occur in psychiatric disturbance, but more likely represent neurological dysfunction. *Olfactory* and *gustatory hallucinations* are most likely related to neurological dysfunction, especially temporal lobe epilepsy. *Tactile hallucinations* such as ants crawling on the skin are common in alcohol withdrawal, drug toxicity, and somatic delusions (Robinson, 2001). *Hypnagogic hallucinations* are part of a sleep disorder in which dreaming occurs with the sleep paralysis that is a normal element of dreaming, but while lying awake; they typically occur when transitioning to sleep or just after awakening and do not represent a psychiatric problem.

4.4.5 Insight and Judgment

Insight is the extent to which the patient recognizes he has a problem, recognizes the nature and various elements of the problem, understands that the problem represents a departure from what is considered normal or at least desirable, understands the negative effects of the problem for self and others, and accepts the need for treatment (Scheiber, 2004; Robinson, 2001). At the highest levels, insight is the patient's appreciation of how her personality, perceptions, behavior, and past experiences interact with present circumstances to give rise to the problem. Few patients will have insight at all these levels (and a large portion of nonpatients will not). Intact cognitive functions are a necessary but not sufficient requisite for good insight. In general, the more severe the patient's psychiatric disturbance or cognitive impairment, the poorer insight. However, patients with intact cognitive abilities, including some with high intelligence, have impaired insight because of their psychiatric disorder.

Virtually all psychiatric disorders potentially can impair insight to some degree. Level of insight tends to vary and can deteriorate with worsening symptoms and improves during remission (Morrison, 2008). Severely psychotic patients will not even recognize they have a problem or that their functioning is impaired. Manic patients often do not know or care they are experiencing or causing problems because of the reinforcing nature of the elation they experience. Histrionic personality disorder and conversion disorder often deny they have a problem or any disruption in functioning/relationships. Borderline personality disorders may acknowledge a problem exists, but blame others for their own dysfunction. Patients with impaired cognitive abilities often have associated impairment of insight; right hemisphere CVA, dementia, and traumatic brain injury commonly are associated with poor insight.

Ultimately, assessment of insight derives from clinical judgment largely based on what the patient says spontaneously and in response to questions regarding the areas outlined above. Generally, ability to articulate accurately about the areas outlined above, or at least in a reasonable and plausible way not at odds with verified information, is evidence of good insight. By convention, insight is rated as good, fair, or poor. It is most meaningful to reference these ratings with specific examples of the patient's good or poor insight into the specifics of their circumstances.

Judgment is the ability to make and execute good decisions. To make good decisions it is necessary to identify, consider, and weigh important information. Important information includes the advantages and disadvantages of various options, the likely outcomes for self and others, what is morally right and wrong, and long-term consequences. This cognitive process leads to a rational decision. To execute good decisions it is necessary to act in accordance with the decision. Often, good judgment requires cognitive reformulation or restraint of emotional inclinations for behavior. Poor judgment can manifest itself in the most basic inaction, such as not initiating simple hygiene, or in the most complex circumstances, such as when someone repeatedly becomes involved with partners who have addictions.

To act emotionally without the guidance of this rational process also can lead to impulsive behavior. Most patients referred for MSE will show some difficulty with judgment, but the behavioral level at which it occurs will vary depending on the nature and severity of the psychiatric disturbance or cognitive impairment. Similar to insight, virtually all psychiatric disorders potentially can impair judgment to some degree. Patients with schizophrenia may not have the judgment to maintain even basic health. Individuals experiencing a manic episode often use bad judgment and engage in outrageous behavior such as spending sprees or audacious social interactions. Patients with borderline personality disorder may assault, vandalize, or make a suicide gesture because of bad judgment.

Insight and adequate cognitive ability are necessary but not sufficient for making good decisions. As with insight, patients with adequate and even superior cognitive abilities have impaired judgment. However, ability to verbalize rational responses to hypothetical scenarios presented in interview is not a reliable predictor of the patient's ability to use good judgment in everyday circumstances. At times, psychiatric and brain damaged patients are able to verbalize accurate knowledge about the appropriate action, but when confronted with the real-life circumstance this knowledge does not guide their behavior, such as when the brain damaged patient accurately identifies the dangers of using power tools but does it anyway or the co-dependent patient goes back to an abusive spouse despite being able to articulate the dysfunction and danger of the relationship. Thus, while assessment of judgment is to some degree based on the patient's verbal responses in interview, it is most accurately evaluated based on the patient's past judgment as reflected in behavior. Finally, to some extent, cultural issues determine what is rational good judgment and what is not. For example, presuming to select your child's marriage partner and negotiating the terms of the marriage would be considered bad judgment and irrational in American culture, but is expected behavior in others.

4.5 Cognitive

4.5.1 Orientation

Orientation is awareness of personal identity, time, location, and circumstances (i.e., what led up to the patient's referral for MSE and why are they here). Most patients seen for MSE will be oriented in all these spheres and it is significant for those who are not. It is not unusual for patients to not accurately know the date, especially if they are hospitalized, but they should at least be able to indicate if it is in the first or last half of the month. Otherwise, perfect performance is expected (Carlat, 2005; Morrison, 2008). Disorientation most often is a sign of brain dysfunction. Delirious patients and those with moderate or worse dementia are disoriented; disorientation is common in the acute phase following CVA and traumatic brain injury. Psychotic patients usually are oriented unless they have severe thought disturbance or hallucinations. Orientation is expected to be accurate in all other forms of psychiatric disturbance.

Two, and frequently three, aspects of orientation can be surreptitiously assessed in the course of conversation with the patient. Upon first approaching the patient, introduce yourself and many times the patient will respond by telling you their name; if not you can say "and what is your name?" After explaining who you are and what you are doing, it is natural to ask the patient "So, tell me what led up to you being here." The patient's response to this question will reveal if they are oriented to location and present circumstances. If the patient's response does not clearly reflect accurate orientation, ask directly. When you begin the cognitive tests (described below) you can ask the patient to write his name, date, and address on a sheet of paper. Any dimensions to which the patient is not spontaneously oriented should be assessed with simple multiple choices: e.g., are you in a doctor's office, hospital, or clinic? Or for more disoriented patients: are you in a church, hospital, or school? The patient who responds correctly to multiple choices is better oriented than one who does not.

4.5.2 Attention/Concentration

In more recent neuropsychological models, the cognitive abilities formerly known as attention and concentration are now referred to as *working memory*. However, we will use the terms attention and concentration because they still are used when discussing MSE. Simply put, attention is the ability to focus cognitive processing on the appropriate target and avoid being distracted by irrelevant stimuli. While attention generally is limited to accurately detecting target stimuli, concentration adds the demands of sustaining attention over a longer period of time or manipulating and processing the contents of what is attended to. Attention also is a gateway to other types of cognitive processing. Before language can be comprehended, visual–spatial relationships perceived, information remembered or problems solved, the stimuli must be attended to. Thus, if attention is impaired, other types of cognitive abilities likely will be impaired as a consequence. Attention and concentration are affected by brain damage and psychological disturbance of many types.

Attention and concentration deficits are common to many types of brain injury including right hemisphere CVA, traumatic brain injury, cortical and subcortical dementias. Delirium is always accompanied by impaired attention, and many drug-induced states are as well. Impaired attention may reflect attention deficit hyperactivity disorder (ADHD). Anxiety, depression, psychosis, histrionic personality, and somatoform disorder all can affect performance on attention and concentration tests. Usually, it is not possible to discriminate between these underlying psychological causes of poor attention based on attention test performance alone; this is determined by findings from other parts of the MSE and the patient's history. For example, patients with ADHD, depression, and schizophrenia each may be intermittently inattentive and it is not possible to distinguish between them based on how many digits each can repeat in order. It is the extra-test behavior that distinguishes them, with the patient with schizophrenia talking back to voices, the depressed patient sitting passively expending little apparent effort and the patient with ADHD losing track of the task when a magazine picture of a motorcycle distracts him. Assessing attention and concentration gives an indication of how reliably the patient processes information and as such serves as a guide for structuring interactions with the patient ranging from simple medicine instructions to psychotherapy approaches.

Attention and concentration are subjectively assessed throughout the MSE by observations of the patient's behavior and verbal responses. More obvious behavioral signs of attention problems are motor restlessness (e.g., frequent shifting in the chair, standing and walking around the room, peering out the window, doors or at objects in the room), attending to extraneous sounds, being distracted by ambient stimuli and doing something else while the examiner is attempting to engage in conversation. More subtle signs of attention problems are evident in the quality and cadence of verbal responses. The patient may begin answering a question before it is completed. Tangential answers or irrelevant answers represent problems with attention and concentration. The poorly attentive patient may start answering a question, become tangential and then ask, "What was the question again?" or indicate they do not know what the original question was if a circumstantial answer is interrupted with an inquiry.

The most common test of attention probably is digit span forward and backward. Digit span forward is a measure of attention and digits backward of concentration (using the definitions described above). It is best to have digit sequences written in advance for ready reference and to assure accuracy of scoring the patient's performance (i.e., so you can remember what the digit sequences were!). Different digit sequences should be used for forward and backward to avoid potential confounding of memory for number sequences (which is more likely if the patient uses the superior strategy of "chunking" numbers). Read numbers at the rate of one per second. Average performance is similar for ages 20–64 years after which there is a slight decline (see Table 4.5). In general, individuals with more education will perform at the top of the average range and those with lower education at the lower end.

Other commonly used tests of concentration are to ask the patient to spell a word backward. This is an easy task and failure indicates likely significant problems with concentration; accurately spelling words demonstrates some capacity for concentration, but does not rule out concentration problems. Serial calculations also are a favorite MSE test of concentration (Daniel & Carothers, 2007; Morrison, 2008). An easy version is to start with 1 and count by 3's. Most people can perform 13 trials with no more than one error (usually adding 3 to 19 and getting 21). The more standard format is serial subtraction by 7 starting from 100. Most people can perform serial subtractions with only one or two errors in 14 trials. Although useful for screening attention, it is important to keep in mind that as many as 58% of normal individuals make some errors on these types of tasks (Robinson, 2001; Shader, 2003; Strub & Black, 2000).

Table 4.5 Average digit span performance by age

Age	20–64	65–69	70–89
Digits forward	6–8	6–8	6–7
Digits backward	5–7	5–6	4–5

Compiled from Wechsler (1997)

4.5.3 Memory

Memory is a complex cognitive ability that involves the recall or recognition of previous experience (Cummings & Mega, 2003). The formation of new memories involves recognition and registration of the initial sensory input, retention and storage of the information, and recall or retrieval of the stored information (Strub & Black, 2000). Memory impairment is one of the most common sequelae of brain damage of all kinds and is the most prominent early deficit of progressive dementias like Alzheimer's disease. Memory distortion occurs as part of the presentation of many forms of psychopathology, but often the quality of MSE memory performance is different from patients with brain damage. For purposes of MSE, memory can be divided into remote, recent, immediate, and delayed. The first two are recall of events from many years and a few days to months ago respectively; the latter two are the types of memory evaluated by MSE cognitive tests.

Memory impairment associated with many types of brain injury such as traumatic brain injury, CVA, early and mid-stage progressive dementia typically is worse for recent information and relatively preserved for past or remote information. In these cases, the patient's memory deficit will be most evident on the memory tests for words and figures given in the MSE and for recall of recent history (i.e., since head injury or CVA, or in the case of dementia recall of the past few months) with relatively good recall of past personal history (before onset of brain injury or dementia) several years ago. In more advanced stages of dementia and more severe brain injuries, memory is impaired for everything.

Anxiety and mood disturbance also can interfere with memory performance. In these cases, the patient likely does not have true memory impairment; rather, psychological processes interfere with their ability to perform to potential. Severe anxiety can greatly interfere with memory test performance, but usually is not a factor at low levels. Depression also decreases memory test performance. Often, people who are depressed do poorly on free recall but are accurate on recognition tests. Presence of depressed affect and mood disturbance help confirm this pattern of memory performance is because of depression. However, this pattern of memory performance and affective change also is seen in many subcortical dementias. Distortions in memory of past events are part and parcel of many types of psychopathology. Patients with histrionic personalities will recall events in exaggerated and dramatic fashion. Individuals with borderline personalities will remember relationships in a distorted manner as either idealized or extremely negative. Patients with antisocial personality disorder may lie to serve their purposes.

All these circumstances of inaccurately reported memories are the result of personality functioning distorting what is otherwise an intact memory capacity.

Evaluation of remote and recent memory is obtained when taking history of recent events and psychosocial history. Key aspects of this information obtained from the patient are verified (e.g., by family) to determine the reliability of memory in these areas. Impaired attention will interfere with memory of new information and evaluation of attention is described above. When assessing immediate and delayed recall in MSE, the goal is to determine in a screening fashion if the person is capable of recalling new information following delay. Although many references recommend a delay period of 5 min, a 20-min delay is necessary to ensure the patient's consolidation and storage are evaluated. While many MSE formats include recall of only verbal information, it is important also to evaluate visual-graphic memory for those rare patients who may have a previously unrecognized cerebral event lateralized to the right hemisphere, and to screen for cognitive deficits among those who have identified cerebral involvement.

Tell the patient you are going to say three words that you want them to remember. We use the words *screwdriver*, *compassion*, *brown* presented in that order (to minimize the chances of the patient using a visual or verbal mnemonic such as "brown screwdriver"). Say all three words at once, pausing briefly between each. Then have the patient repeat all three. Repeat all three as necessary until the patient can say all three. Then have the patient copy three figures. We use the figures in Fig. 4.1.

The patient's accurate copy of the figures indicates their basic visual-perceptual and construction skills are intact. Difficulty copying the figures may indicate deficits in either of these areas and merits further neuropsychological evaluation. Consistent or exclusive left-sided errors on drawing likely reflect some degree of left inattention or neglect associated with right hemisphere damage. Tell the patient you will ask them to draw the figures again from memory later. Continue the MSE for 20 min keeping the patient engaged with other activities to assure they are not rehearsing the words or figures. Then ask them to recall the words. Almost all normal people under the age of 70 will remember the words immediately; people over 70 may spontaneously remember only two and should at least recognize the third in multiple-choice format. For any words not spontaneously recalled, give a cue: e.g., "one of the words was a tool/feeling/color." If the word(s) is not recalled with the cue, give multiple-choice recognition: e.g., "Was the word: pliers, wrench or *screwdriver* – frustration, *compassion* or admiration – *brown*, black or gray?" Then ask the patient to draw the three figures again. For any figures not spontaneously recalled,

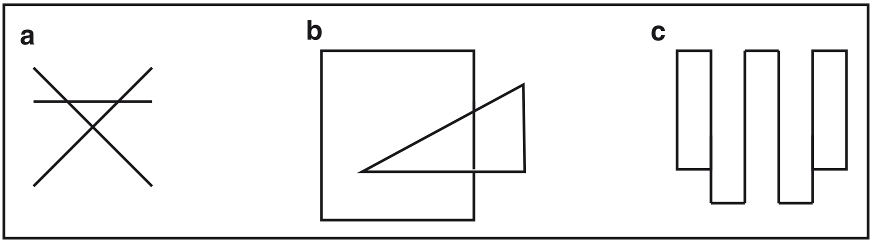

Fig. 4.1 Figures for memory test

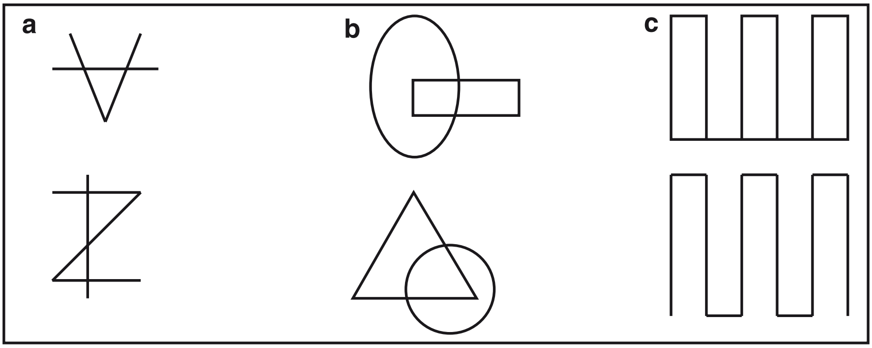

Fig. 4.2 Multiple-choice figures for figure recognition

horizontally present the target figure with the foils in Fig. 4.2 for multiple-choice recognition; be sure that the target figure appears in a different position (i.e., first, second, or third) for each trial. Most everyone under age 60 will remember all three figures. Ability to recall and draw figures after a delay declines steadily after 60 and many normal people in their 70s and 80s will recall only one or two of the drawings; however, most people older than 60 will recognize the figures in multiple-choice format they do not recall spontaneously. Performance below these expected levels merits referral for neuropsychological evaluation, especially in the absence of significant findings in other areas of the MSE.

4.5.4 Intelligence and Abstraction

Evaluation of *intelligence* and *abstraction* essentially is an attempt to estimate where the patient's abilities fall on a continuum of innate overall cognitive ability. If an accurate measurement of intelligence or abstract thinking ability is needed, the patient should be referred for neuropsychological evaluation. Short of this, these abilities can be only grossly estimated based on the MSE.

The best demographic predictors of an individual's intelligence are education and occupation. In general, people with less than a high school education will have low-average or below intelligence, high school average, college high-average, and graduate education high-average to superior intelligence. There are people for whom education underestimates their cognitive ability and in these cases occupational achievement is a better indicator. If someone dropped out of school in the 11th grade but now owns a large real estate company, is a deacon in his church, and designs web pages as a hobby, the high-average intelligence predicted by these nonacademic activities likely is more accurate than the low-average level predicted by education. In general, higher technical and professional occupations require higher levels of intelligence for success than manual labor and clerical jobs. In the MSE, the patient's use of vocabulary, ability to give concise but thorough answers, and ability to independently comprehend the implications of statements are indications of intellectual level.

Abstraction is the capacity to recognize and comprehend relationships that are not immediately or concretely apparent. Most MSE references describe two approaches to assessing abstraction: similarities and proverb interpretation. Similarities involve asking the patient in what way two objects or concepts are alike. Test items range from more obvious and concrete to more abstract in ascending difficulty, for example, celery–carrot, music–sculpture, love–hate, and talking–listening. Responses may range from accurate identification of the abstract similarity (they are vegetables) to a correct but concrete similarity (you can eat both of them) to a correct but irrelevant or incorrect response (you buy both in a store). Proverb interpretation is asking the patient to explain the more general meaning of a concrete statement. These also are organized from simple to complex, for example, there's no use crying over spilt milk, a stitch in time saves nine, people who live in glass houses shouldn't throw stones, and a rolling stone gathers no moss. Responses are scored along the same lines as described above for similarities. For both similarities and proverb interpretation patients of low education/occupational status are expected to get only the simplest item of each set correct, high school education/average occupational attainment two to three correct, and high education/occupational status all four items correct.

Poor performance on these types of items confirms the patient of limited education and occupational success is of modest innate cognitive ability. However, poor performance by someone of advanced education/high occupational success suggests the possibility of brain dysfunction and should be considered in conjunction with performance on other cognitive screening tests described above. Performance on these types of tests is useful for identifying low cognitive ability because of endowment or brain dysfunction but not for identifying psychiatric disturbance.

4.5.5 Summary

The MSE is an interview screening evaluation of all the important areas of a patient's emotional and cognitive functioning, often augmented with some simple cognitive tests. The MSE provides the data for formulating a psychiatric diagnosis or developing a working hypothesis regarding psychiatric diagnosis. A standardized approach increases reliability of the MSE. Specifying the behavior on which key interpretations and conclusions are based also is important for MSE reliability. Genuine concern for the patient, awareness of her/his cultural background and some degree of individualization of the MSE is necessary to set the patient at ease, develop rapport and is an effective way to collect comprehensive, reliable, and valid data. MSE data are most meaningful when considered in the context of a thorough psychosocial and psychiatric history. General knowledge of the overlapping etiology of psychiatric and medical processes is important to prevent misdiagnosis.

A comprehensive MSE includes evaluation of 12 areas. *Appearance* is what the patient looks like. *Behavior* is how the patient acts. *Motor* activity is the type and quality of movements the patient makes. *Attitude* is how the patient feels and what they think about participating in the MSE. *Mood* is the internal emotional state of the patient and *affect* is the external expression of emotional state. *Language* is the ability to use symbols to communicate and *speech* is what the patient says and the quality of how they talk. *Thought* is the internal dialog that occurs in the patient's mind while *perception* is the patient's sensory-perceptual experience and interpretation of external events and circumstances. *Insight* is the extent to which the patient recognizes the existence, nature, and scope of her problems; *judgment* is the ability to make and execute good decisions. *Orientation* is awareness of personal identity, time, location, and circumstances. *Attention* is the ability to focus and sustain cognitive processing on the appropriate target. *Memory* is the ability to recall previous experience as well as store and recall new information. *Intelligence* and *abstraction* are innate cognitive abilities; the former is overall level of cognitive ability, the latter the ability to recognize and comprehend relationships that are not immediately or concretely apparent.

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Chapter 5
Dealing with Defenses and Defensiveness in Interviews

Steven N. Gold and Yenys Castillo

5.1 Dealing with Defensiveness

Learning to conduct an effective interview is essential to carrying out almost any form of clinical assessment or intervention. However, the unpredictability of the interviewing process can make mastery of this skill a challenging and, at times, even discouraging task. Each client introduces into the interview situation, unique characteristics that limit the therapist's ability to control the direction of the interview. The most common complication is client defensiveness, which prevents the interview from unfolding predictably and straightforwardly. Therefore, an adequate understanding of defenses is essential for competency in interviewing. If interviewers do not understand defensiveness and how to effectively respond to it, the clinical interview is likely to be, at best, frustrating and, at worst, a pointless enterprise for both participants.

Clinical activities are most productive when there is collaboration between practitioner and client. Defensive reactions can be easily misread by clinicians as a refusal or failure to take part in a cooperative effort (Teyber, 1997). Therapists may wonder, "if clients really want help, why are they so difficult, antagonistic, and evasive?" Such perceptions may elicit irritation, causing therapists to become more confrontational and forceful in pressing for a straightforward response from the client. Almost invariably, this approach has the opposite effect, and the situation rapidly grows increasingly unproductive (Lankton & Lankton, 1983; Vaillant, 1992).

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5.2 Understanding Client Defensiveness

Therapists who are able to make sense of their clients' defensiveness are more prepared to respond to it. At the very least, therapists may limit the potentially disruptive consequences of defensive reactions. And in the best of circumstances, they may effectively manage defenses and promote therapeutic progress.

5.2.1 Identifying and Classifying Defensive Behaviors

Introductory texts on personality theory commonly catalog defenses into different types (e.g., repression, denial, projection, reaction formation). It is assumed that a familiarity with this classification system assists therapists in recognizing and effectively responding to client defensiveness (Vaillant, 1992).

However, identifying a behavior as defensive and classifying it according to a typology is of little pragmatic usefulness. Simply telling clients that they are "being defensive" likely compounds the problem by eliciting more defensiveness (Teyber, 1997). For instance, phrases such as "You're in denial" or "You're projecting" may be unproductive as clients perceive them as being critical and insulting.

5.2.2 The Meaning of Defensiveness

When therapists categorize and label, they assume the position of an outside observer. The most constructive approach to defensiveness is to try to understand it from the client's experience and perspective. A useful starting place is to consider the meaning of defense not as a technical psychological term, but in common, everyday usage. A defense is a protection (Benjamin, 1995). Hence, clients who seem defensive can be understood to react under the assumption that they are being threatened or attacked (Teyber, 1997).

Accepting clients' defensive behavior as an indication that they are feeling vulnerable and threatened can be difficult, particularly for student therapists. And clinicians who focus on their intention to be helpful are more likely to become perplexed and impatient with the client's efforts at self-protection. However, taking the client's vantage point increases the likelihood of responding in productive ways. Begin by accepting that the client feels endangered, and proceed by trying to appreciate why this might be the case.

Direct confrontation is unlikely to be effective because defenses are mobilized in response to a perceived threat (Lankton & Lankton, 1983; Vaillant, 1992). Clients may perceive confrontation as criticism for employing self-protection and as an attempt to remove them (Teyber, 1997). Explicitly challenging the client's defenses, therefore, is most likely to increase clients' efforts at self-protection.

Moreover, in its use as a psychological term, defensiveness often refers to forms of self-protection that are triggered and operate automatically, outside of the person's conscious awareness. When this is the case, clients themselves may view self-protective maneuvers as unacceptable or unnecessary. Another possibility is that clients may face a situation that they perceive as being too threatening and disruptive to acknowledge consciously. Under such circumstances, directly addressing clients' defensiveness is highly likely to be confusing and anxiety provoking (Teyber, 1997).

5.2.3 The Value of Self-Protection

Interviewers remain perplexed at clients' need for self-protection. Why would clients feel endangered by a situation intended to provide assistance? Undeniably, there are clinical situations, such as court-ordered or involuntary evaluations and interventions, in which clients have not fully chosen to participate. In those circumstances, it seems obvious that clients would feel threatened and defensive. However, it is more difficult to understand the much more common situation in which clients who actively seek therapy, still feel a need for self-protection.

But imagine a hypothetical client at the other extreme – someone notably lacking in defensiveness. Picture a person who immediately, from the very first interview, reveals the most intimate, intense difficulties and shortcomings willingly and in detail, without conveying the slightest recognition of being in a vulnerable position. This is an individual who, rather than being at all guarded or self-protective, responds to any and all inquiries without any censoring, and unhesitatingly accepts any feedback or recommendations offered by the interviewer.

This form of presentation, completely lacking in defensiveness, would probably arouse concern. After all, why should clients who have not yet had the opportunity to get to know therapists – and consequently do not have grounds on which to determine whether their therapists are understanding, responsive, trustworthy, or helpful – indiscriminately open up to them? If clients operate in a similar manner outside of therapy, there would be good reason to believe that they are particularly vulnerable to being manipulated and taken advantage of by other people.

This extreme example highlights a crucial point: some measure of defensiveness and self-protection is both expected and desirable (Benjamin, 1995; Bowins, 2006; Cramer & Jones, 2007; Vaillant, 1992). Life is often complicated, demanding, and stressful. Managing interpersonal relationships, especially with unfamiliar people, is frequently a challenging and convoluted enterprise. Therefore, some degree of caution and self-protection is a useful and even necessary component of effectively dealing with day-to-day pressures and interpersonal interactions (Bowins, 2004; Bowins, 2006). In many instances, precisely because the business of managing daily life is so complex and taxing, it is useful that these safeguards be mobilized rapidly and spontaneously, without having to be filtered through conscious processing (American Psychiatric Association, 2000). From this perspective, client defensiveness becomes much easier to comprehend.

5.3 Common Reasons for Client Defensiveness

In addition to the general value of and need for self-protection in day-to-day life, there are numerous reasons why clients experience pulls to self-protect, which are specific to the interview situation. It would be impossible to catalog all of these reasons. However, to better understand client defensiveness, it would be useful to explore some of the more common motivations for self-protection in the interview.

5.3.1 The Stigma of Seeking Help

Many people who seek counseling or psychotherapy do so months or even years after their difficulties first began. This itself can be seen as a manifestation of defensiveness. Receiving professional help constitutes an acknowledgment that one has problems which have been impossible to resolve, and are severe enough to warrant the attention of someone with special training and skills (Teyber, 1997). The stigma of having psychological difficulties leads many people to conclude that having problems which require outside assistance is a shameful sign of weakness. Moreover, a cherished value in society dictates that people should rely on themselves and resolve their own difficulties, or failing that, be able to turn to friends or family members for assistance. In other words, many people may view the very fact of seeking counseling or therapy as an admission of failure, which constitutes a serious threat to their self-esteem.

A related concern is clients who believe that they do not deserve professional help. Some clients have had life experiences that have led them to feel very comfortable giving to and assisting others, but awkward and insecure receiving help from others. Clients with this background tend to minimize the seriousness of their difficulties. They may wonder aloud to the interviewer whether their problems are severe enough to require professional attention. Particularly when it is clear to the interviewer that the problems are substantial, these clients may be seen as having developed the conviction that they are not worthy of caring, concern, and assistance. The attention and interest of the interviewer challenges this belief about themselves, thereby creating confusion and anxiety.

5.3.2 The Threat of Betrayal

Many clients seek help for problems caused or compounded by adverse circumstances and painful life experiences. In many instances, these misfortunes center around interpersonal relationships in which the client experienced mistreatment or hurtful interactions with others. These clients enter therapy in a particularly vulnerable position (Teyber, 1997). How can they trust that the therapist will not betray them as others seem to have done in the past? Clients cannot answer this question without first observing therapists over time to appraise how safe it is to rely on them. Once again, it is reasonable from this vantage point that clients will employ a certain degree of defensiveness. Attempting to maintain protection against being hurt or betrayed by the therapist, at least until a certain level or trust can be established, is understandable. However, clients often find it difficult to acknowledge that they harbor mistrust toward the therapist who is, after all, assisting them.

5.3.3 The Threat of Change

Another threat inherent in the therapeutic situation is the uncertainty created by the prospect of change. As bad as a problem may be, it is familiar and known to the sufferer. Despite being disturbing and disruptive, clients often experience problems as part of who they are. The possibility of being without the problem, therefore, carries with it the concern that life, and even one's feelings and behaviors, will be unpredictably and unsettlingly different.

Change is threatening because it usually requires substantially altering existing convictions. Most individuals are strongly invested in the way they see things. To a large extent, their self-concept is anchored in subscribing to particular beliefs and perspectives. In other words, people define themselves, in part, in terms of their convictions. Taking the risk of altering the way they see and think about things can be confusing and anxiety provoking because it calls into question people's very definition of who they are, and endangers the security that comes with their sense of certainty that things are as they believe them to be.

5.3.4 The Threat of Relinquishing a Solution

Clients are sometimes defensive because problems themselves serve as forms of self-protection. Clients may employ a problem as a solution to whatever difficult circumstances exist at the time. Recognizing that clients' problems sometimes also represent solutions, and can serve a purpose, raises another source of threat for the client. For clients, resolving a problem may simultaneously represent losing a valued solution.

For example, some people are mistreated as children – they are beaten, yelled at, and criticized – and, therefore, find it difficult to express or in some instances even experience emotions. These individuals have learned not to display intense feelings – particularly anger or sadness – to avoid being attacked. To solve the "problem" of growing up in these circumstances, and to reduce the frequency with which they were battered or criticized, these individuals have developed the *ability* to control their feelings. Whereas this solution was effective and perhaps even necessary at the time, these clients' inability to express emotions in the present prevents others from knowing and responding to their feelings, which might be a source of interpersonal misunderstandings and considerable personal frustration. As children their self-protection shielded clients from extremely painful mistreatment. They may therefore perceive the attempts of therapists to "help" them to express feelings more clearly and effectively, as efforts at removing a valuable form of protection. It is understandable, from this perspective, why clients might react defensively to such "assistance."

5.3.5 The Threat of Acknowledging Responsibility for a Problem

That people can only change those things over which they have control may seem an obvious statement. However, some people enter counseling only to end up blaming their difficulties on others and refusing to take responsibility for overcoming their problems. Having gained insight into past experiences leading to their difficulties, they now feel powerless over changing their present circumstances. They reason that if situations in the past created their problems, then they have no hope of resolving their present difficulties.

Many of the problems that people bring to a therapist are not of their own making. Initially, at least, they arose in response to faulty learning, or unfortunate, overwhelming circumstances. In most cases, therefore, the origins of current difficulties may have been entirely outside the clients' control and responsibility.

Some clients find it difficult to acknowledge responsibility for overcoming their difficulties. They have difficulty understanding that even if they did not create their own problems, only they have the capacity to resolve them. Consequently, clients may defensively deny having the power to correct the problems that brought them to therapy. They confuse responsibility in the sense of "having the ability to respond" with "being at fault."

5.4 Constructive Responses to Client Defensiveness

So, how can therapists effectively deal with defensive reactions in the clinical interview? The central premise presented here is that in order to be productive, responses to defensive reactions must be guided by the ability to make sense of them from the client's point of view (Lankton & Lankton, 1983). This process is guided by the idea that clients engage in defensive behavior when they perceive the existence of a threat or danger. Once therapists formulate a hypothesis about the origins of a particular instance or pattern of defensiveness, they obtain a rationale from which to construct an effective response.

The process of dealing with defensiveness in the clinical interview is presented here in a series of steps. However, rigidly executing the full range of steps is neither practical nor desirable in many situations. There is nothing magical or sacrosanct about the steps described here or the order in which they appear. They are, rather, a teaching device to organize the material and make it more comprehensible. In actual practice, steps may be skipped, blended together, or carried out in a different order, depending on the dictates of clinical judgment at particular moments.

5.4.1 Prevention of Defensiveness

Beginning therapists are often puzzled when clients feel threatened by the very process designed to assist them. However, as discussed in the previous section, many clients perceive the clinical interview as an inherently threatening situation. Help-seeking situations implicitly carry the threat of being stigmatization, betrayal, change, assuming responsibility, and other "dangers."

Therapists who recognize these threatening qualities can prevent many defensive reactions by creating an atmosphere that reduces the likelihood of clients feeling vulnerable and in need of self-protection. It is a common temptation, however, to deny or minimize this aspect of the therapeutic encounter. Therapists' attempts to reassure the client with direct statements such as "There is nothing to be afraid of," "You can trust me," or "Things can only get better" are likely to have the exact opposite effect. For many clients, such denials further convince them of the need for self-protection as they may conclude that the therapist is naive, foolish, a liar, or simply incapable of understanding their concerns (Vaillant, 1992).

Acknowledging that the interviewing situation is threatening to the client is more likely to be successful (Teyber, 1997). Statements such as "I know this is difficult," or "People don't come to trust someone overnight," can be somewhat comforting because they convey that the therapist recognizes and appreciates the dangers of the situation. Knowing that the therapist understands can lead some clients to feel validated, reassured, and safer. However, for other clients, acknowledgment can be threatening in its own way. Some clients reason that if therapists know their vulnerable areas, then therapists have the power to use those vulnerabilities against them. Thus, before making direct statements about perceived threats, therapists should consider how clients are likely to react. This means they must ask themselves – based on what is known about the client's personality, the circumstances which brought this individual to counseling, and the nature of the problem – "How will this person react to this specific statement?" When therapists are uncertain about a response, it is best to avoid direct statements about potential threats, whether they take the form of denial or affirmation of danger.

In most instances, therapists should be mindful of the potentially threatening qualities of the clinical interview, and take anticipatory action to minimize the likelihood that the client will feel endangered. Traditionally, defensiveness has been thought of as an intrapsychic process, something that originates and occurs within the individual.

In contrast, it is useful to conceptualize defensiveness from an interpersonal, interactive point of view (Benjamin, 1995). It is true that some people have a greater tendency to react defensively than others. Similarly, particular situations are more likely to elicit defensiveness than others. However, the quality of interaction between therapist and client can have considerable influence on the probability that defensiveness will actually arise (Benjamin, 1995). Each of the following four strategies facilitates a quality of interpersonal relations that minimizes the likelihood that clients will feel threatened, and consequently, defensive.

5.4.1.1 Do Not Move Prematurely into a Goal-Directed Stance

Little can be expected to be accomplished in a clinical interview if therapists are not goal-directed. They must be clear about the purpose of the interview, and have some plan for achieving that goal. Therapists are ultimately responsible for monitoring and ensuring that steps are being taken to attain the objectives established for the interview.

However, it can be counterproductive to become too invested in a goal-directed stance from the outset of the interview. Whether an interview is being conducted as part of an assessment or for treatment purposes, it is important for therapists to avoid an immediate, single-minded focus on "getting down to business." Particularly in an initial interview, therapists must remember that clients do not know them, and may not even be entirely clear about the purpose or format of the interview. Taking a few minutes to address these issues at the outset is likely to pay off immeasurably in the long run. If clients feel comfortable, it is more likely that the therapist–client interchange will be more collaborative and less defensive. This, in turn, will result in a more productive and efficient use of the time allocated for the interview.

Most therapists adopt different approaches to the interview in dependence of whether such interview constitutes an assessment evaluation or the beginning of a course of therapy. Although some clients make the decision to seek an evaluation independently, many are referred by a third party (e.g., a social worker, physician, attorney, or teacher). Hence, it is especially important in an assessment interview to ask clients at the outset why they think they need the evaluation. This way, therapists can correct misconceptions that may create unnecessary apprehensiveness and evasiveness on the part of the client. Direct questioning implicitly communicates that the therapist is attentive to treating clients as informed and active participants in the assessment process. Perhaps most important, by opening the interview with this discussion, clients have a chance to ease into the interview process and develop some familiarity with the interpersonal style and intentions of the therapist.

In an initial treatment interview, the client should be allowed to make the transition into the therapeutic process, and to develop some sense of comfort with the counselor. It is usually more desirable for clients to take a more active role in shaping the direction of the therapy interview. Consequently, therapists should avoid setting the precedent or expectation that the client's role in the therapy interview is to passively respond to questions. If therapists decide to use direct questioning to help put the client at ease at the outset of the interview, then it is especially important to “shift gears” when making the transition from rapport building to exploring the problem.

Consider, for example, an instance in which the interviewer chooses to help a client feel at ease by asking direct, informational questions (e.g., Did you have any trouble finding the office? Who referred you to me? or Have you ever been in therapy before?). If the counselor immediately moves into the more therapeutic portion of the interview by asking direct, specific questions (e.g., What problem brings you here? When did it start?), then the client is likely to answer each question, stop, and wait for the next question to be asked. Instead, it is often more useful to begin exploring the problem by asking very general, open-ended, or indirect questions (e.g., What do you want to talk about today? Tell me about yourself, or Why don’t you fill me in about your situation?).

This approach has several advantages. It subtly communicates to clients that they are expected to take some responsibility for the direction of the interview. It is also likely to minimize defensiveness in many clients because the open-ended and permissive aspects of this approach give clients some measure of control over what is discussed, in how much detail, and at what point in time. For many clients, the more power they are given in governing the therapeutic process, the less threatened and defensive they feel, and the more willing they are to open up and work collaboratively with the counselor.

However, no one’s approach is effective for all clients. Some clients will feel more threatened and guarded when presented with general, open-ended questions. To feel more comfortable, these clients need the clarity and direction provided by more specific, close-ended questions at the outset of the interview. However, once they feel more at ease, they can tolerate the ambiguity of more general, open-ended questions.

5.4.1.2 Continually Monitor the Quality of the Interaction and Relationship with the Client

Establishing rapport and helping clients to feel at ease, rather than threatened, is not accomplished once and for all at the outset of the assessment interview or therapy process. Throughout the course of assessment or treatment, therapists must be attentive to the quality of their interactions and relationship with the client. If therapists become too immersed in being goal directed, at the expense of the client’s comfort level and of maintaining a collaborative relationship, then there is an increased risk that the client will feel threatened.

A great deal of defensiveness can be avoided through regular monitoring of the client’s level of security and the quality of the therapist–client relationship. It may be especially useful in an ongoing course of therapy for the therapist to assess the client’s degree of comfort at the beginning of each interview. Sensing that the client is feeling apprehensive and threatened is often a sign that defensive reactions will follow. A therapist who is sensitive to this uneasiness can use the mechanisms discussed later in the section to respond to defensive reactions.

5.4.1.3 Recognize the Legitimacy of Perceived Threats

Therapists must be responsive to perceived threats although they may seem groundless (Linehan, 1993; Teyber, 1997). It can be difficult to assume clients' perspective and appreciate their vulnerability. However, the more the therapists can empathize with a client's perception of danger, the more effective they are likely to be in helping. For this reason, it is usually not helpful, and perhaps harmful, to try to deny clients their feelings. Instead, making a purposeful effort to appreciate their legitimacy will aid therapists in responding to clients' concerns in such a way as to make them feel understood, respected, and, ultimately, safe (Lankton & Lankton, 1983; Teyber, 1997). When clients feel confident that therapists empathize with and are willing to validate their perceived dangers, they feel less of a need to protect themselves from therapists or the interview process.

5.4.1.4 Anticipate Potential Threats

An invaluable strategy for preventing defensive reactions is for therapists to anticipate aspects of and points in the assessment or therapy process that are likely to be perceived as threatening to a particular client (Teyber, 1997; Vaillant, 1992). With this knowledge, therapists can develop a plan to avoid the development of a defensive response. In addition, the client's general propensity to become defensive is likely to diminish with the realization that the therapist is committed to upholding safety and security. Hence, clients will feel less of a need to be guarded, wary, and self-protective.

Before approaching a threatening target area, it is helpful to introduce a related topic. As that topic is being discussed, the therapist has the opportunity to observe the client's level of discomfort and evasion. If the client does not appear unduly distressed, then the interview might proceed to another topic more closely related to the target area. In this manner, the interviewer can maneuver progressively closer to the target area, simultaneously attending to the client's level of discomfort and avoidance. If at any point the client seems to grow excessively agitated, uneasy, or elusive, then the therapist can elect to postpone raising the target topic.

Another useful approach is to explicitly suggest that the issue not be discussed unless the client feels ready to. This often makes self-protection unnecessary. It makes it clear that the therapist considers it the client's decision whether or not to proceed. It also conveys that the client is in control of the direction and pace of therapy.

5.4.2 Responding to Defensive Reactions

The likelihood of defensive reactions can be greatly reduced with the aforementioned measures. However, these cannot always completely eliminate its occurrence. Therapists, therefore, must be prepared for defensiveness, and know how to respond to it. The following are possible responses.

5.4.2.1 Do Nothing

In many instances, the more effective initial response may be to do nothing or, in other words, to take a "wait and see" approach. There are several reasons for adopting this strategy. Frequently, the therapist's first impulse is to feel annoyed or irritated in response to client defensiveness. If these feelings show, then the sense of threat that triggered the defensive reaction, and consequently the defensiveness itself, is likely to increase. On the other hand, maintaining a calm and supportive interpersonal stance may be sufficient to dispel the whole problem (Linehan, 1993). Often, the most useful aspect of identifying and understanding client defensiveness is that it alerts the therapist to the value of not reacting or intervening. The following example illustrates this point:

A very bright and articulate woman entered therapy because of depression caused by the loss of a loved one. Several sessions into counseling, in the midst of talking about her depression, she "interrupted" herself, abruptly changing the subject and stating, "This fat [she was markedly overweight] is a protection, you know." She then immediately resumed discussing her depression. When she had finished what she was saying, her therapist asked her what she had meant by the remark about her weight. She replied nonchalantly that she had no idea, and immediately returned to the topic of her depression.

A few sessions later, there was a similar incident. In the midst of discussing another topic, she suddenly asked the therapist whether he had seen the magazine cover depicting a celebrity who had revealed that she had been sexually molested as a child. "Do you think the same thing could have happened to me?" she asked. "I don't know," the counselor replied, upon which she immediately resumed what she had been saying before she interrupted herself.

Over the next few months the same pattern of events recurred every few sessions. The client would interrupt herself with a remark off the topic she had been discussing. On those occasions when the therapist would ask her what she meant by the remark, she would reply "I have no idea," and return to what she had been saying previously.

As these incidents accumulated, the remarks made by the client increasingly seemed to suggest that she had been the victim of sexual abuse as a child. However, the therapist made a purposeful decision not to propose this to her, assuming that if this was the case, and she was prepared to recognize it, she would do so on her own. Finally, after a number of these incidents had occurred, the client herself began to suspect that she had experienced and blocked out childhood sexual abuse. "Do you think that's possible?" she asked the therapist. "I don't know, what do you think?" he replied. At that point, she began to address the issue directly, gradually retrieving a number of memories of childhood sexual abuse.

Considerably later in treatment, the counselor asked her, "What would have happened if in one of our initial meetings I had asked you if you had ever been sexually abused as a child?" "Why," she responded, "the same thing that happened when any therapist I saw before got anywhere near that area. Although I did not know about the abuse consciously, I was aware of it on some level. When they got anywhere near that subject, I would panic inside, and immediately leave treatment."

5.4.2.2 Align with the Protective Function

When therapists conclude that the situation calls for more active intervention, it is important that therapists respond in a way that aligns with the protective function of the defensive reaction (Lankton & Lankton, 1983). This can be done, for example, by overtly encouraging clients to slow down or postpone confronting the threatening material until they are ready to do so. This is often extremely effective. It has the advantages of simultaneously acknowledging the threat, affirming its legitimacy, validating and supporting the impulse to be self-protective, and endorsing the value of addressing the threatening material. Aligning with the protective function shifts the issue from whether to confront the threat to when is most reasonable to do so because the therapist permits the client to postpone confronting the threat while affirming the importance of eventually addressing it. Consider this example:

A man told his therapist in the first session of therapy that he was experiencing serious and very disturbing problems. He stated that he desperately wanted help from them. However, having said that much, he then began to explain in an agonized tone of voice that as much as he wanted to resolve his problems, he did not feel comfortable telling the therapist about them.

After a brief silence, during which the client appeared extremely distressed, the therapist replied that she could certainly understand his hesitancy. They had just met, and it was not reasonable to expect that he would feel sufficiently comfortable with her to discuss such sensitive matters. She told him that they could always return to that topic some other time, and asked him what else he would like to talk about. Another brief silence passed, and the client replied, "Oh heck, I might as well go ahead and tell you what's troubling me," and proceeded to do so. From there on in, the therapy continued without any major episodes of defensiveness. The man was able, in fact, to resolve his problems within a few sessions.

This illustrates an additional component of effective responses to defensiveness: offering the client's choice. A common component of the experience of threat is the perception that the choices or options are limited (i.e., the client is cornered or trapped). A response that offers more options or choices that clients had recognized will help remove the feeling of being trapped and thereby lower defensiveness.

5.4.2.3 Discuss the Defensive Behavior Directly

There are instances in which direct discussion of defensive behavior is appropriate (McCabe & Priebe, 2004; Teyber, 1997). Often this is referred to as "confrontation" of the defenses. The adversarial connotation provides an indication of why this strategy is frequently ineffective. Challenging or assailing behaviors aimed at self-protection can only be expected to result in an increased sense of threat and a resulting increase in defensiveness (Vaillant, 1992). A key element in the effective application of direct discussion of defensive reactions is timing. A direct approach is most likely to be effective after the defensive reaction has been allowed to develop fully. Resisting the temptation to challenge or attempt to dismantle the client's defenses prematurely implicitly communicates to the client that the interview situation is a safe and secure one (Vaillant, 1992). Clients are likely to be reassured that the interviewer appreciates the value of defensiveness and therefore can be trusted. Usually, at that point, clients are in a position to acknowledge and relinquish the defensive behavior. For example:

A woman came into therapy to address a series of extremely violent assaults throughout her childhood, the emotional effects of which continued to have a debilitating impact on her functioning as an adult. After making substantial progress and experiencing considerable relief in the first several months of therapy, she repeatedly forgot about and failed to appear for her appointments. In each instance she would apologize and reschedule, providing a plausible excuse. Her therapist made a point of avoiding suggesting to her that these incidents were defensive in nature, accepting her excuses without questioning them.

Once this sequence of events had occurred a number of times, the therapist remarked to the client, "There certainly have been a good number of times when you forgot about your appointment. What do you make of that?" Without any further prompting, the client replied, "I guess I'm relying on the old pattern I've always used in the past to deal with difficulties. Instead of recognizing and dealing with problems before they get out of hand, I pretend they're not there and let them grow so big that I can't ignore them anymore." Not only was she able to let go of defensively forgetting her therapy appointments, but also she was able to recognize and modify a pervasive pattern of behavior that had been adversely affecting many areas of her life until that time.

5.5 Summary

Defensiveness indicates an effort to maintain self-protection in response to a perceived threat. It is easy for the interviewer to become irritated by defensive reactions, seeing them as obstacles to accomplishing the aims of the interview. However, it is essential to appreciate that the capacity for self-protection is a desirable and essential component of effective functioning in a complex, stressful society. The likelihood of developing defensive reactions is greatly reduced when therapists are aware of the potentially threatening aspects of the interview situation, appreciate the legitimacy of self-protection, and establish and maintain a supportive and nonthreatening relationship with the client. When defensive reactions do occur, effective intervention is guided by understanding the nature and source of the threat perceived by the client. Resisting the temptation to react prematurely to client defensiveness, encouraging clients to temporarily maintain self-protection while suggesting that eventually it will no longer be needed, and offering choices to clients to counteract the misperception that they are trapped or endangered are effective strategies for reducing defensiveness.

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Chapter 6
Consideration of Neuropsychological Factors in Interviewing

Brian Yochim

The goal of this chapter is to accomplish two purposes: (1) to provide an introduction to neuropsychological factors of which to be aware when conducting diagnostic interviews, and (2) to give an introduction to the art and science of conducting neuropsychological assessment interviews. The chapter serves as an overview of how cognitive or brain dysfunction can manifest in a diagnostic interview and also provides an introduction to neuropsychological interviewing for general clinical psychology students or students focusing in clinical neuropsychology. The chapter focuses on neuropsychological assessment with adults. Pediatric neuropsychology will not be explored, but interested readers are referred to Sattler (2002) for information on neuropsychological assessment interviews with children.

6.1 Factors That Might Suggest to Any Psychologist That Cognitive or Brain Dysfunction Is Occurring and the Need for a Neuropsychological Evaluation

When clinical psychologists conduct diagnostic interviews, they use their knowledge of behavioral syndromes to note certain behaviors that may be observed in a client. These observations are noted in a Behavioral Observations section of a report, and this section tends to be present in any mental health evaluation. The behaviors to note are often the same as what is typically included in a "mental status exam," and the two labels for this section of an assessment report can often be interchangeable. Chapter 4 covers elements of the mental status exam in detail, so this chapter will only provide a brief overview. There are certain behaviors exhibited by clients that can suggest the presence of brain dysfunction and the need for further evaluation by a neuropsychologist.

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When clients repeat questions or seem to forget things you have told them (e.g., where the bathroom is, what time the evaluation will be over), this suggests that a dementing illness such as Alzheimer's disease may possibly be present. If this disease is indeed present, the client may not be a good historian and if the disease is severe enough, he or she may not benefit from psychotherapy because of an inability to remember things from one session to the next. When clients perseverate on a topic of conversation or give tangential or circumstantial answers to questions, this also suggests that a cognitive disorder may be present. Clients who are hostile or easily irritated or, at the other extreme, being flirtatious or making inappropriate remarks (e.g., commenting on the looks of the examiner in an objectifying manner) also may be experiencing brain dysfunction that will interfere with the assessment and treatment process. These behaviors may be caused by damage to the frontal lobes from a head injury or a disease process such as a brain tumor or frontotemporal dementia. If the client shows a face devoid of expression (i.e., a masked face), speech that is slow and quiet (i.e., hypophonic), and delayed answers to questions, this suggests that Parkinson's disease may be present. People with Parkinson's disease have intact ability to remember information over time but take longer to learn new things and to recall it. If the client seems easily angered, has depressed affect, and has uncontrollable movements (choreiform movements), then she or he may have symptoms of Huntington's disease.

Other important behavioral observations from a neuropsychological standpoint include elements of speech such as fluency, comprehension, and word-finding. Problems in these areas can indicate the presence of aphasia caused by a stroke or head injury, or a progressive dementia such as primary progressive aphasia. Often clients have subtle deficits in language comprehension that can interfere with functioning and these deficits are often mistaken for a "memory" problem. Even if a language comprehension problem is not too severe, the client could still benefit from psychotherapy.

It is often useful to ask about current events by asking, for example, "Can you tell me what's been going on in the news lately?" This can be followed up with more specific questions such as "where are we currently at war?" or asking about specific recent events such as "was there a natural disaster somewhere recently?" or "is there a particular issue the president is struggling with lately?" Asking about current events is often illuminating as to the client's orientation and ability to remember episodic events. That is, if the client cannot remember recent major events, they are likely to have a set of symptoms indicative of delirium or dementia. In summary, these are all elements of a mental status exam or behavioral observations that can indicate the presence of cognitive or brain dysfunction that will affect the diagnostic interview process and subsequent treatment. If problems are notably present, the client should be referred to a neuropsychologist and/or a neurologist for further evaluation and intervention.

Another factor that may surface and suggest cognitive dysfunction is when the client reports any history of a neurological problem such as a head injury, stroke, brain tumor, or self-observed memory problem that has not been addressed by a neuropsychologist. Whereas these problems are often assessed and treated by medical professionals such as general practitioners or neurologists, clients are usually not referred to neuropsychologists for evaluation of how these problems have affected cognitive functioning. For example, a client may have had a head injury from a car accident with a loss of consciousness of 30 min. The client may have been seen in the emergency department, found to be stable after a couple of hours, and sent home without any notification that their cognitive abilities may have been affected. Clients may struggle for months or years with problems at work or interpersonal domains without having the knowledge of the link to their neurological problem and ways to accommodate them. It is also possible that clients, particularly older adults, may have experienced an event such as a car accident recently (e.g., 3 months ago) with no loss of consciousness or trauma but changes since then such as abnormal gait or headaches that could indicate a slowly developing subdural hematoma resulting from the accident. A subdural hematoma is a mass of blood that takes up space in the cranium, putting pressure on the brain that can result in serious injury or even death.

Clinicians will often find that they are the first to discover that a client has a history of a traumatic brain injury (TBI). TBIs can have subtle or major effects on a person's daily life and it is important that the cognitive effects of TBIs get evaluated so that clients can be aware of areas that may prove to be a struggle for them and ways to accommodate these limitations. For instance, even mild TBIs can leave the client able to function in most environments but to have difficulty in highly stimulating situations such as social events, public areas like malls and sporting events, or driving in new places while conversing with others. All the clinician needs to do to find if the client has a possible history of TBI is to ask if the client has ever had a head injury or had a time when she or he lost consciousness. If clients have lost consciousness for longer than 5 min, they may have lingering deficits that should be evaluated by a neuropsychologist.

Another factor that suggests possible deficits may be present from a TBI is if the client has no memory of events surrounding the injury. Particularly, if the client lacks memory of events *after* the injury (i.e., posttraumatic amnesia), the injury may have been severe enough to cause deficits. Sometimes a client will be aware that his or her cognitive abilities or personality has changed since the accident, but the client may be unaware that a certain type of professional (a neuropsychologist) is trained specifically to figure out what deficits a person may have resulting from a TBI.

If the client has a suspected history of a moderate or severe TBI, this can affect the interview process in several ways. He or she may have poor temper control and may get easily annoyed with questions that do not seem pertinent or important, or that are of a personal nature. On the other hand, she or he may show a lack of initiative or interest, and not be very invested in the assessment process. Both of these presentations can be related to frontal lobe damage. Clients with TBI can be slow to respond and slow to generate an answer to a question. This would be related to the diffuse axonal injury (DAI), or the stretching and other damage to axons that occurs in a TBI. Memory problems may be present that interfere with the client's ability to take in new information or to recall recent information.

The clinician may find that a client has had symptoms of strokes that may have left the client with lingering deficits. Chief symptoms of stroke include sudden weakness or numbness on one side of the body, sudden change in speech or vision, sudden onset of severe headache pain, and, generally, any sudden change in behavior. Clients and professionals need to be aware of these symptoms and should seek treatment immediately if these symptoms are present. A clinician may see a client who has experienced these symptoms in the last week, and the client should be told to seek emergency help or at least to call an advice nurse.

If the clinician finds that a client may have dementia, or if this is known from a prior neuropsychological evaluation, then there are some ramifications for the successful completion of the interview. The client may be a poor historian, providing inaccurate information. Sometimes clients give no behavioral indication of dementia and the clinician assumes the client's report to be accurate, only to find later that much of their understanding of the client is inaccurate. The client's memory problems will also interfere with their recall of things that the clinician may tell him or her. Dementia also often affects people's interpersonal functioning. The client may be less inhibited from saying offensive statements, or may cross certain social boundaries. Fortunately, clinicians should be accustomed to dealing with clients with deficient social skills and should understand that these may be behavioral manifestations of underlying brain damage.

Sometimes clients may not have cognitive problems of their own, but they may be caregivers for someone with cognitive problems such as dementia or problems resulting from a TBI. In this case, the client may not be in need of evaluation or treatment for cognitive issues per se, but she or he may be significantly affected by someone else's cognitive disability. In this situation, the person who has the cognitive problems should be evaluated and treated, and the clinician should evaluate how the cognitive problems play a role in the client's presenting problems. Caring for someone with a cognitive disability can significantly impact a client's mental health, and the burden of this may be a major focus of treatment. Farias et al. (2008) created a scale for a caregiver to complete that a clinician can use to determine if significant cognitive decline has likely occurred in a care recipient. If significant decline is reported, the care recipient should be referred for a neuropsychological evaluation if it has not already occurred.

Many neuropsychologists come in contact with clients who have misconceptions of the nature of dementia stemming from interactions with other medical professionals. This may result from inaccurate information being provided by the medical professionals, or from the client misunderstanding what has been told to him or her. For example, one client was told that "You don't have Alzheimer's disease, but you have age-related dementia." Those with current knowledge of dementia know there is no such thing as "age-related dementia," but that one cause of dementia highly related to age is Alzheimer's disease. Another client was told that he has "pseudodementia" (cognitive dysfunction related to depression in late life, that is often mistaken for dementia), but was nonetheless prescribed medications for dementia. Clients who need education about dementia should be given it by a neuropsychologist or other clinician who is familiar with this area, especially since our knowledge of the causes of dementia is currently changing rapidly.

Table 6.1 summarizes factors that should lead a clinician to make a referral to a clinical neuropsychologist.

The discussion so far has focused on factors that would lead a clinician to suspect cognitive dysfunction, leading to an appropriate referral. When referrals are made to a neuropsychologist, certain information should be included to lead to a successful arrival at an answer to the question the referring provider has. Anytime a referral is made to a neuropsychologist, the referring provider should include mention of the condition (suspected or known) that may be causing cognitive impairment. This should be paired with some description of the cognitive problems the client is thought to be experiencing (memory problems, getting lost while driving, difficulty comprehending instructions, etc.). Some examples of useful referral questions are: "client seems to have suffered a stroke a year ago and has had trouble speaking since then"; "75-year-old woman with memory complaints; please evaluate if she has Alzheimer's disease"; "client was in car accident 3 years ago and has had trouble working since then; please evaluate if he has cognitive impairment from a head injury."

Table 6.1 Factors that should lead a clinician to refer a client for neuropsychological evaluation

Client reports:
- Declining memory or other cognitive ability, or change in behavior, of unknown etiology

Medical history includes:
- Traumatic brain injury
- Stroke
- Brain tumor
- Possible cognitive effects resulting from neurological diseases such as Parkinson's disease, Huntington's disease, etc.

Client displays certain behaviors suggestive of neuropsychological dysfunction:
- Repeating questions during interview or forgetting information given to him/her
- Poor comprehension of things said to her/him (if acute, client should seek emergency evaluation for stroke)
- Difficulty speaking (if acute, client should seek emergency evaluation for stroke)
- Socially inappropriate behavior that may be caused by brain damage

Client is confused about current diagnosis or treatment for it:
- Client's understanding of dementia reflects out-dated knowledge (e.g., "age-related dementia" vs. Alzheimer's disease)
- Client's treatment regimen does not fit with their understanding of diagnosis (e.g., taking dementia medications but having the understanding that he or she does not have dementia)
- Client has seen several professionals who reportedly have not been able to arrive at a diagnosis

6.2 Clinical Neuropsychological Interviewing

6.2.1 Introduction

We will now turn to the second part of this chapter, which is an introduction to the art and science of conducting a neuropsychological assessment interview. This is a skill which begins with readings such as this but can only be learned through observation of skilled interviewers and the experience of conducting multiple interviews. Readers are referred to works by other authors (Donders, 2005; Lezak, Howieson, & Loring, 2004; Strauss, Sherman, & Spreen, 2006; Vanderploeg, 2000) that also serve as excellent introductions to neuropsychological interviewing.

There are three main sources of information in a neuropsychological assessment, as explicated by Mitrushina, Boone, Razani, and D'Elia (2005): history, behavioral observations, and test data. The clinical interview provides two of these sources of information, so it is very important to neuropsychological assessment. Neuropsychological testing is only conducted to test hypotheses that are generated before and during the interview. There are times when it becomes clear during the interview that test data are unnecessary to answer the referral question, and in these situations it is hard to justify the client's time and effort in undergoing testing. For example, the client may be clearly delirious, severely demented, in the throes of a major depressive episode, or floridly psychotic, and testing would be an unnecessary and perhaps unethical use of time. Most of the time, however, test data are very important pieces of the neuropsychological assessment puzzle. The history and behavioral observations gathered in the interview, and the test data, are combined by the neuropsychologist and used to arrive at a diagnosis and formulation of the client's problems. This information then is linked in two directions: (1) to anatomical regions of the brain, or neuropathological processes, that are likely to be involved in the client's difficulties, and (2) to external daily living ramifications, and recommendations. This model is depicted in Fig. 6.1, which is an expansion of the model outlined by Mitrushina et al.

There are many different styles of interviewing; some clinicians vary greatly in their styles from one client to the next, whereas others use the same approach with every client. Some clinicians approach the interview knowing nothing about the client, whereas others use the interview simply to query the client's responses on a form they have already completed. An approach that I follow is to send a detailed history form to the client ahead of the appointment, along with a letter reminding them of the appointment and explaining a little of what to expect in the evaluation. When the client comes to the appointment, the interview consists of a discussion of the reason for referral, current symptoms, and then clarifying information that they provided on the form. This method has several advantages: (1) The client can look up phone numbers, dates, and other specifics from their medical history without having to remember them during the appointment. The form also prompts them to bring in any past neuropsychological assessment reports and copies of other important records. (2) If the client completes the form as desired, it can save considerable

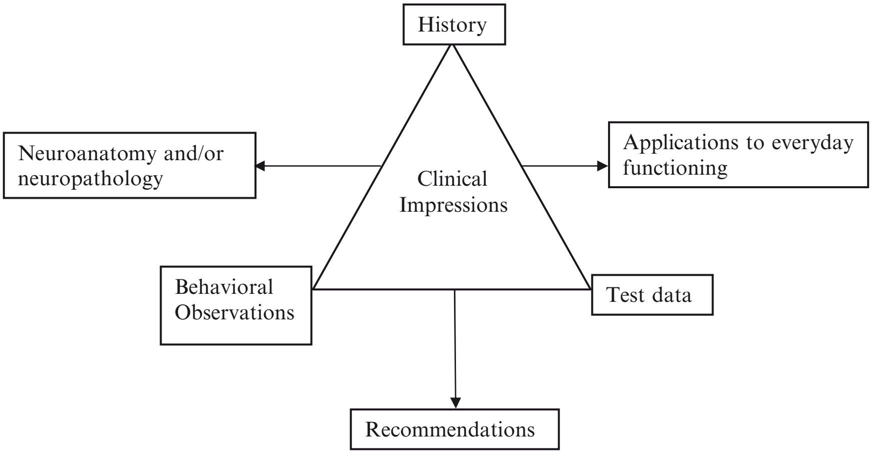


Fig. 6.1 Model of neuropsychological assessment (adapted from Mitrushina, Boone, Razani, & D'Elia, 2005)

time on the day of the interview. (3) The form can be completed by a caregiver that may not be able to accompany the client to the appointment. However, many clients neglect to complete the history form ahead of time and thus no time is saved. Also, some content areas (current mental health, description of current cognitive symptoms) are best addressed during an in-person interview, and thus these areas are not covered on this history form.

6.2.2 Standard Areas to Cover in a Neuropsychological Assessment Interview

There are several areas that are typically covered in a neuropsychological assessment interview. Any one of these may represent the primary problem or cause of cognitive dysfunction.

One important area to cover is the client's medical history. Here, the interview in a sense serves as a substitute for having actual medical records. If the clinician can obtain medical records ahead of time, then she or he should review these records in detail to obtain a solid understanding of the client's medical conditions. If the clinician can do this ahead of time, it will decrease the amount of time spent discussing medical issues in the interview. Unfortunately, in many settings the clinician cannot obtain these records until the client arrives to the clinic and signs release of information forms, which are then sent to medical clinics. Medical facilities vary in their responsiveness to requests for records, so a clinician may never be sure that he or she will be able to obtain these records. This means that the clinician must ask the client or caregiver for their description of the medical history.

Medical records often provide information that was inaccurately reported by the client. For example, a client reported that after having a stroke, she was unconscious for 3 days. A review of medical records found her to be alert at the time of the stroke, with no mention of any loss of consciousness in the following days. The client was unlikely to be lying; rather, she probably simply had a poor memory of the event or misunderstood the question asked of her. Another way medical records make a valuable contribution is that they offer documentation of when memory problems began. Clients and their caregivers often have poor recollection of when memory problems began, whereas clinicians can often find mention of memory problems in medical chart notes. For example, notes from years ago may say something like "client reports increasing memory problems, and word-finding difficulties are present during the interview." Information such as this can help the neuropsychologist establish a diagnosis and prognosis for the client.

There are certain medical conditions that are related to cognition and some that are less related. Obviously, any disease or injury related to the brain is important information to have. Problems with other organ systems can have cognitive effects too. Problems with the circulatory system (e.g., hypertension, diabetes, heart diseases such as atrial fibrillation, and high cholesterol) can lead to poor circulation in the brain. Major events in this system such as myocardial infarctions or heart surgery should be noted, as these sometimes trigger cognitive problems. Problems with the liver and kidney can also lead to cognitive dysfunction. Disorders with the prefix "hep-" are usually related to the liver, and "renal" problems imply the kidneys. If possible, the clinician should strive to obtain lab results. High white blood cell counts can imply an infection of some sort, which can lead to delirium. A high thyroid stimulating hormone (TSH) count can imply an underactive thyroid gland, which can affect cognitive functioning. Other important labs to note are vitamins B_1 (thiamine) and B_{12}. Clients typically are unaware of these lab values, or that they have even been drawn, so clinicians must obtain these values from medical charts.

Other medical conditions that can impact cognition include a known history of stroke, brain tumors, AIDS, and recent surgeries. Surgeries in older adults can trigger a delirium that can last for days afterward or can disrupt blood supply in the brain, leading to cognitive deficits. When interviewing a client, an attempt should be made to see if the onset of cognitive problems is related to parts of their medical history. For example, the client may have started to experience memory problems soon after a myocardial infarction. This would imply more of a vascular problem than Alzheimer's disease.

The client should also be asked about any family history of medical problems. For example, if both of the client's parents died of strokes or heart attacks, the client is likely to have vascular diseases that may impact cognition. If the client's parents both had Alzheimer's disease (which may have been misdiagnosed in decades past), that increases the likelihood that the client has or will develop Alzheimer's disease. It should also be noted that family histories of certain medical problems do not ensure that the client will have the same problems; it simply increases the probability.

A list of current medications should also be obtained from the client. This can be facilitated by having the client bring all her or his medications to the appointment, or viewing a list on a recent medical document (though these can certainly be inaccurate!). Likewise, it is helpful if the client writes down a list of medications ahead of time and brings it to the appointment. Medications that can impact cognitive functioning, as reviewed by Houston and Bondi (2006), include tricyclic antidepressants, sedative/hypnotic medications such as benzodiazepines and barbiturates, antiepileptic drugs (particularly first-generation medications), and older, sedating antihistamines.

Every psychologist, including neuropsychologists, has the specialized training and responsibility to evaluate clients' current mental health. Again, prior records should be reviewed if possible. Whether or not the client's prior history is known, the clinician can simply ask "how has your mood been lately?" We can also ask "Do you still enjoy activities that you've enjoyed before?" These two questions assess two main symptoms of major depressive disorder. Questions about anxiety and symptoms of schizophrenia (hallucinations and delusions) should also be asked. Interviewing about mental health problems is covered in other chapters of this book. Clinicians should also inquire as to what treatments clients have received for mental health problems, whether psychotherapeutic or psychopharmacological, and specifics such as how long the treatment occurred, how effective it was, and if there were side effects of pharmacological treatment. All clients should also be asked if they have ever seen a neuropsychologist before. If they have, those assessment results are extremely valuable in serving as a baseline to which to compare current test results.

Substance use is another area every psychologist should have some expertise assessing. A helpful way to begin this line of questioning is to ask "How much alcohol do you drink?" This immediately normalizes the regular ingestion of some amount of alcohol, and can make the client less defensive, with the goal of obtaining as accurate an answer as possible. If the clinician instead asks "do you drink any alcohol?" the client may simply respond "no" to avoid discussing this area, and the clinician will neglect to obtain important information. In this area, the clinician should assess the classic variables of frequency, duration, and intensity. The clinician should find out how often the client has an alcoholic drink, how much he or she has at a given time, and how long they have kept this pattern. Clinicians should inquire as to whether there were times in the past when the client used alcohol excessively, or "maybe more than you should have?" Clinicians also should not assume that people drink less alcohol as they age. On the contrary, alcohol abuse is a problem in older adults as well and is more of a problem because of its contribution to disabling conditions and the slower recovery from them (Johnson-Greene & Inscore, 2005). Current alcohol abuse can lead to symptoms of dementia that may resolve with substantial decrease in alcohol use. Lifelong alcohol abuse unfortunately can lead to a form of dementia that is not likely to improve. Clients with this type of dementia may demonstrate several characteristic features during an interview: memory problems, both for recent as well as more distant information, and a somewhat unique impairment in memory for the order of temporal events. For example, they may report that the Space Shuttle Challenger explosion occurred after Bill Clinton was president, or that President Kennedy was assassinated after

Martin Luther King was assassinated. They may display a lack of awareness of their own deficits, saying “I’m just stressed” when confronted with the difficulties they are having.

Alcohol is notable for its problematic effects on cognition. Less is known about the effects of other drugs on cognition. Nonetheless, clinicians should obtain a history of use of other substances such as marijuana, cocaine, methamphetamines, LSD, and heroin. Although the direct effects of these substances on the brain are less clear, a lifestyle marked by heavy use of these substances or addiction to them can have detrimental effects on brain functioning.

The client’s developmental history should be assessed, and this is more important the younger the client. Early childhood risk factors, including problems at birth and childhood diseases, should be evaluated. Any deviation from normal development should be noted. Especially important for neuropsychological assessment, the clinician should obtain some details about the client’s schooling. The quality and quantity of education should be assessed, and any difficulty in particular subjects or any history of special education should be noted. The quantity and quality of education will determine the population to whom the client is compared when evaluating their neuropsychological test data. Thus, this piece of information, along with the client’s age, is critical and must be a piece of information gathered from every single neuropsychological assessment client. The clinician can inquire into this by asking “how far did you go in school?” It is important that the clinician translate this into a number of years of education. Neuropsychological tests are normed by years of education, not degrees completed. Thus, if a client finished high school, this is coded as 12 years of education. If they left high school a month before graduating, that is coded as completing 11 years of education. The key is how many full years the client completed.

For clients from impoverished backgrounds, the quality of education should also be assessed. This is particularly important for older African American clients who were educated in the Southern areas of the USA. The disparities in quality of education between African Americans and European Americans in the South are well documented (Manly, 2006). Thus, 12 years of education for someone from an impoverished environment is not equivalent to 12 years of education from a more enriched environment. Likewise, clients who were educated in other countries should be asked about the quality of their education. Clients from rural backgrounds may have had shorter school years than clients from more urban backgrounds. This assessment of quality of education is important because neuropsychologists must compare a client’s test performance to performance by people of similar backgrounds. If a client with less education is compared with a population of the same age with more education, the client may be misdiagnosed as impaired when in fact he or she has no impairment.

Occupational history should also be assessed in all clients, for several reasons. This provides the clinician a sense of the baseline functioning of the individual, to serve as a comparison for current functioning. Clients who have a history of short durations at any job, who are now seeking disability compensation, may have personality characteristics that interfere with their ability to stay in a job for very long and they may be seeking a way to reduce their need for employment. Also, a description of the client's occupation and how her or his cognitive problems have manifested at work can be elucidating for the clinician in arriving at diagnostic hypotheses.

Legal history should be assessed, especially for clients currently involved in the legal system, to determine if there is any secondary gain to be had if the client is found to have cognitive impairment. The clinician should keep in mind that the base rate of malingering in forensic settings is estimated to range from 20 to 47% (Larrabee, 2000). Also, the clinician should know if there is a strong probability that her or his assessment findings will be presented in court, and if there is a chance that he or she will have to testify. Of course, every report should be written with the assumption that it could be presented in court.

Lastly, if clients are reporting cognitive problems the clinician should assess the effect of the disorder on daily life. This will help in two ways: (1) it often helps in arriving at a diagnosis. For example, if the client reports that she often forgets conversations with co-workers and it is interfering with her job, this may be a classic symptom of Alzheimer's disease. (2) It is always helpful to see how the disorder interferes with each client's particular needs. For example, the effects of a TBI on a client's social behavior may be very important for a client whose job has high social demands, whereas a nighttime security guard may be less affected by social behavior changes than by decreased attention skills.

6.2.3 The Interview Process

It cannot be overstated that one important purpose of the interview is to develop rapport with the client. Rapport serves as the foundation upon which all clinical work is completed. If the clinician does not have rapport with the client, then the interview may be unsuccessful in obtaining necessary information. Without rapport, the client also may not feel motivated to expend sufficient effort during the testing phase. If the client does not give sufficient effort, then the test data may be invalid and thus may be a useless venture. If rapport is not established and the interview and testing do not yield useful data, then the client has not been served. Fortunately, most psychologists are well-trained in establishing rapport with clients. Some things should be done at the start with a client to establish rapport, and the first meeting with the client is critical in this regard. Clients should be greeted with a smile and welcomed to the clinic. They should know that their comfort is a priority; thus, they should be informed where the restroom is, and offered a drink of water. Clinicians may wish to keep snacks on hand so clients do not feel hungry. Some clinics offer coffee and tea to clients, but other clinics avoid this to set firmer boundaries with clients. Efforts should be made to have frequent eye contact with the client, and to share a laugh at least once. I recommend to students that they find something they have in common with a client and to point that out to the client. This can be a place in common where they have both lived (without discussing where the clinician currently lives), a favorite pastime, favorite restaurant, favorite sports team or TV show, or other commonality that can be discussed without crossing professional boundaries. Whereas beginning clinicians may feel that the time spent discussing a TV show is not beneficial to clinical needs, this can be strongly justified by the development of rapport with the client that serves as the foundation upon which all clinical work is completed.

It is recommended that neuropsychologists utilize a hypothesis-testing approach when conducting an interview, and during the entire evaluation and report write-up. That is, as the client begins to report information, the clinician should generate hypotheses to explain the client's difficulties. These hypotheses should be tested and refuted or confirmed. For example, a standard hypothesis to test in the evaluation of cognitive dysfunction in older adults is that the client is experiencing delirium (a medically caused temporary impairment in cognition). This can be easily refuted if the clinician finds that cognitive problems have been present for months, or that there is no acute medical condition (e.g., an infection) that can be causing the dysfunction. The reason all the background information, discussed above, is collected is that this information is used to test hypotheses. For example, the hypothesis of alcohol-induced persisting dementia can be ruled out if the client does not seem to have a history of substance abuse. It is also important that the clinician does not simply seek information that confirms her or his hypotheses. Clinicians should also seek information that would refute their hypotheses. For example, if the clinician thinks Alzheimer's disease is the cause of the client's problems, the clinician should also seek evidence for other causes of cognitive dysfunction. Vanderploeg (2000) discusses the importance of being aware of "confirmatory bias"; this is the tendency to seek and prioritize findings that supports one's hypothesis, while ignoring or minimizing evidence that contradicts one's hypothesis (Greenwald, Pratkanis, Leippe, & Baumgardner, 1986). The clinician is operating as a scientist in this regard. Vanderploeg explains that

> If the neuropsychologist focuses on evidence consistent with working hypotheses and minimizes contradictory data, then hypotheses will always be confirmed, whether correct or not. The corrective measure to confirmatory bias is to systematically list both confirmatory and disconfirmatory information and to consider alternative explanations for observed behaviors. (p. 8)

Vanderploeg (2000) and Donders (2005) discuss the method of starting the interview with general, open-ended questions (e.g., "so what brings you here today?") and gradually moving toward specific questions. This method allows the examiner to observe how the client reacts to ambiguous stimuli and how the client structures an unclear situation. Valuable behavioral observations can be made, such as the client's ability to find words when communicating freely, her or his ability to stay on topic, ability to respond to your needs, etc. This also gives the client the opportunity to express certain needs, problems, or concerns that are most important to her or him (e.g., an older adult saying "My daughter is trying to put me in a home" or "My memory is shot and I just know I've got Alzheimer's disease," or a younger adult saying "I really want to be able to go back to work" vs. "I am unable to work and I'm trying to get disability compensation"). This gives the examiner valuable insight into the client's thought processes. As the interview proceeds, the clinician can probe for details into relevant areas and ask about areas that have not been covered.

It is important to be flexible and responsive to the client's wishes for the order in which information is covered. If the client brings up a topic that the clinician planned to address later, the clinician may wish to let the client discuss the topic right then, instead of asking the client to wait until later to discuss it. For example, substance use may be typically covered in the middle of an interview, but if the client says something like "my wife thinks my memory problems are worse when I'm drinking a lot," then the clinician may wish to take advantage of that open door and discuss substance use at that time rather than waiting until later. Similarly, if the client says "I have a family history of Alzheimer's disease," then the clinician may wish to discuss family history of neurological problems at that time rather than revisiting the topic later. Along the same lines, the client may move into a different topic area before the clinician feels finished with the first topic. Here the clinician must decide if it will harm rapport if the clinician asks the client to come back to the first topic. For example, the client may say something like "it could be that these problems are related to the time I was knocked out in a fight, but I think that the stale air in my building is interfering with my work. Let me tell you about the building where I work…" At some level, the clinician may wish to have the client to direct the interview, especially for the goal of establishing rapport, but this need must be balanced with the need for the clinician to maintain control and obtain information needed to help the client.

Some clinicians prefer to interview the client without having any caregivers in the room, whereas others interview the client and caregiver simultaneously. It is certainly important to get information from both parties, but each method has its strengths and weaknesses. If the client is interviewed alone, it is possible that their cognitive impairments or motivations will lead them to report information that is inaccurate, and the clinician may not realize this. This can be ameliorated by interviewing a caregiver at a different time and checking for accuracy. Sometimes, for reasons of practicality, the client and caregiver are interviewed together. Donders (2005) points out that in this case, care must be taken to allow the client to answer questions independently without being interrupted by the caregiver. The clinician must also show that the client's opinions are valued as much as, if not more than, those of the caregiver. Many clinicians make the mistake of speaking primarily to the caregiver, seeming to ignore the client in the room. This practice, which can be disrespectful to the client, can lead the client to feel unimportant or untrustworthy and thus interfere with rapport. On the other hand, the client may defer to his or her caregiver and make little effort to provide his or her own answer. Here the clinician should also make efforts to encourage the client to provide her or his own opinion on things.

The clinician must strike a balance between guiding the interview so as to include only relevant details and to gain enough of these details, and maintaining rapport with the client. This can be challenging when clients' answers to questions go on tangents about information that is not relevant to the evaluation. For example, a client may give extreme detail about the job he or she held 20 years ago, or a client may complain excessively about the health care system. The clinician must be able to interrupt in a polite fashion to move the client toward providing information that will be more helpful for the evaluation (and thus, the client's needs). This can be done by interrupting and saying something like "I'd like to hear more about that if we have time later, but right now I wanted to ask you about something else. [and then, before allowing the client to comment,] How has your mood been lately?" Interrupting the client can seem intimidating to less-experienced clinicians, but they must remember that the interruption is being done for the client's best interests. If a loquacious client were permitted to talk freely about everything they desired, the evaluation may never be completed and the client will not be served. Sometimes the very nature of the disorder the client has (e.g., dementia) makes the client more prone to such tangential conversation, and more prone to anger if interrupted by the examiner. The examiner must establish adequate rapport to guide the interview in this way. Sometimes it may help to warn the client at the outset that "we have a lot to cover in a small amount of time, so I may have to interrupt you to make sure you're able to leave on time. I apologize ahead of time if I have to do this."

On the other hand, rather than rambling, some clients may not provide sufficient information to answer the clinician's questions and may be resistant to providing more detail. For example, a victim of an assault or other traumatic event may prefer to avoid discussing the nature of the event that caused a head injury, and the clinician must decide whether it is worth pressing for more information at the expense of possibly sacrificing rapport. Most of the time in neuropsychological assessment, rapport with the client is a higher priority than obtaining all the information desired in an interview. Rapport is necessary to obtain accurate test data. Background information can always be obtained from another source or at a later time.

6.2.4 Reason for Referral

One of the key components, and overall goals, of all neuropsychological interviews is clarifying the reason for referral. The reason for referral can generally fall into one of two categories: (1) evaluate the extent, if at all, of cognitive change after a known neurological event such as a stroke, head injury, brain tumor, epilepsy, or a multitude of other conditions that affect cognitive functioning, or (2) evaluate whether a cognitive disorder is present and, if so, what condition is causing it. This differs from the first category in that the client or referring professional does not know if a medical problem is present or not.

The reason for referral is usually the first area of discussion for an interview. Starting with the question "So what brings you here today?" or something similar can provide a great deal of information to the clinician. The client may be an astute, well-informed person who tells you "I've had some memory problems developing over the last two years and I'm wondering if it's Alzheimer's disease," or something similarly detailed, in which case the clinician may find that their client is a cooperative, somewhat accurate historian who is interested in the outcome of the evaluation.

This would bode well for developing rapport. On the other hand, the client may answer that "My doctor said I needed to come here to get my brain checked but I think it's just a silly waste of time." In this situation, the clinician may become concerned about the lack of clarity in the reason for referral and, perhaps more importantly, the lack of interest and rapport in the evaluation.

It can be surprisingly difficult to establish the reason for referral. Referring professionals may not express exactly what information they wish to obtain. They may not point out important information, such as the client appearing in court in several weeks to have a guardian put in place. They often do not supply information that they already know which would be useful to the neuropsychologist. For example, a case manager may refer a 48-year-old woman for evaluation of possible cognitive decline, without mentioning a history of mental retardation or brain tumor. Clients may have no knowledge of the purpose of the evaluation, other than "My doctor/lawyer sent me here." If the client is impaired, and without a caregiver present at the evaluation, they may not be able to surmise why they were sent to the "shrink." In cases such as this, the clinician must make her or his best attempt to infer what the referral question may be.

It is best to clarify the reason for referral before the client even comes to the appointment. This can be completed in a 5- or 10-min conversation with the referring professional ahead of time and can prevent a great deal of confusion the day of the evaluation. Preparatory work like this ahead of time should be done to decrease the amount of time the client needs to spend in the evaluation.

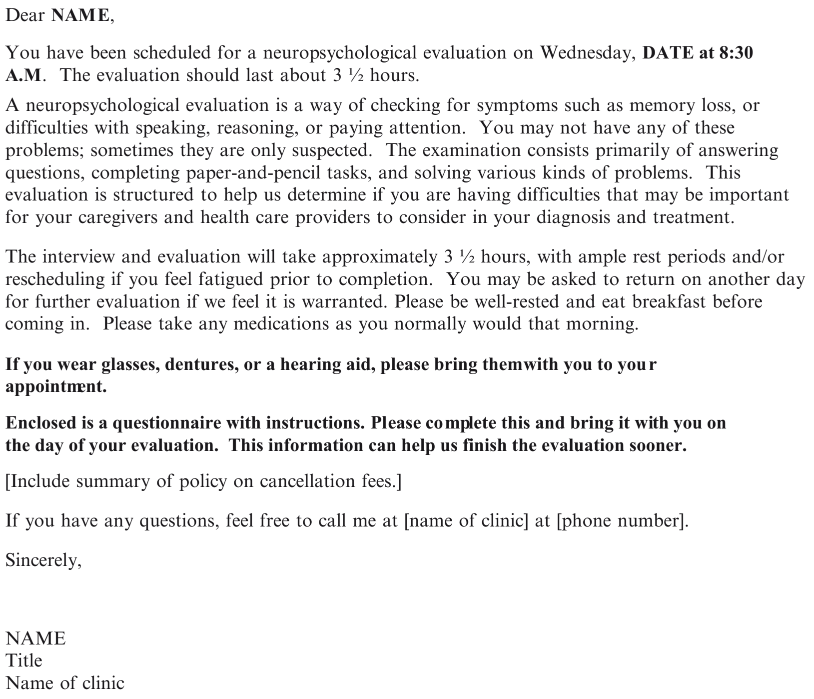
In a neuropsychological interview, the clinician should arrive at the stated reason for referral while also having the goal of evaluating what we know needs to be evaluated. That is, if we know certain factors should be evaluated in the context of a given reason for referral, we should evaluate those factors even if not specifically requested. For example, clients referred for dementia evaluations should also be screened for depressive symptoms, even though clients or referring providers may not request this. If a client is reporting difficulties at work since a TBI, we should evaluate his or her work history before the TBI to assess if there truly has been a change. In other words, we should not just evaluate what the client or referring provider wants to have evaluated. When we go to see a physician, we hope and assume that the physician evaluates things we have not thought of, with the goal of best practice for us. Vanderploeg (2000) discusses this below:

> By imagining what it is you would want and need to know if you were responsible for the client's care (or if you were the client), it is possible to develop meaningful evaluation questions and begin to structure a useful evaluation. The neuropsychologist should answer not only the referral questions that were asked, but also those that should have been asked. (p. 7)

The clinician will be able to deduce the client's understanding of what occurs in a neuropsychological evaluation after asking about the reason for referral. Clients typically have incomplete knowledge of what occurs in a neuropsychological evaluation, and often have no knowledge at all. They may think they are going to have blood drawn, or they may think they are about to have an MRI scan. This should be clarified at the start of the evaluation. Much education can be provided in a one-page form letter sent to clients ahead of time. An example of a letter that is used in my clinic is presented in Fig. 6.2. Anyone can appreciate the value of knowing what a medical procedure will involve ahead of time. Before testing, they also need to be informed that they will be asked to perform activities that they will be unable to do completely successfully. For example, they may feel very frustrated at their inability to learn all 16 words on a list-learning task, unless they know ahead of time that hardly anyone is able to do that. Neuropsychological evaluations can be likened to a vision exam, in which almost no one can read the smallest letters on an eye chart, and it is completely normal if one cannot read the smallest letters. The goal of the vision exam is not to make one feel incompetent, but to arrive at proper accommodations for the client. Clinical neuropsychology is very similar in this regard.

Once the reason for referral is established, the clinician can move into asking questions most pertinent to the referral question. A useful exercise for clinicians to undergo can be to ask oneself "If I only had five minutes to do the interview, what information would I want to get?" This can force oneself to prioritize the most important areas to cover. This often comes down to obtaining a history of the current problem at the expense of more distal information.

The presenting problem should guide what historical information should be obtained by the clinician. Two example presenting problems will be presented: TBIs and dementia. To the extent possible, all information should be obtained from both the client and her or his caregiver.



Dear **NAME**,

You have been scheduled for a neuropsychological evaluation on Wednesday, **DATE at 8:30 A.M**. The evaluation should last about 3 ½ hours.

A neuropsychological evaluation is a way of checking for symptoms such as memory loss, or difficulties with speaking, reasoning, or paying attention. You may not have any of these problems; sometimes they are only suspected. The examination consists primarily of answering questions, completing paper-and-pencil tasks, and solving various kinds of problems. This evaluation is structured to help us determine if you are having difficulties that may be important for your caregivers and health care providers to consider in your diagnosis and treatment.

The interview and evaluation will take approximately 3 ½ hours, with ample rest periods and/or rescheduling if you feel fatigued prior to completion. You may be asked to return on another day for further evaluation if we feel it is warranted. Please be well-rested and eat breakfast before coming in. Please take any medications as you normally would that morning.

If you wear glasses, dentures, or a hearing aid, please bring themwith you to your appointment.

Enclosed is a questionnaire with instructions. Please complete this and bring it with you on the day of your evaluation. This information can help us finish the evaluation sooner.

[Include summary of policy on cancellation fees.]

If you have any questions, feel free to call me at [name of clinic] at [phone number].

Sincerely,

NAME
Title
Name of clinic

Fig. 6.2 Sample letter to send to clients ahead of evaluation date

6.2.5 Traumatic Brain Injuries

The evaluation of TBIs has at least two goals: (1) to reconstruct a history of the event, and (2) to evaluate the effects of the injury on cognition and behavior. Reconstructing a history of the event must also involve gauging the severity of the event, because the severity of the event plays a large role in the outcome for the client's life. The severity of the event can be established in several ways. The Glasgow Coma Scale (Teasdale & Jennett, 1974) can be obtained from medical records, and it provides a very commonly used way to gauge the severity of the head injury. A GCS score in the 3–8 range is considered severe, 9–12 is moderate, and 13–15 corresponds to a mild head injury (Rimel, Giordani, Barth, & Jane, 1982).

During the clinical interview, the neuropsychologist should assess the client's memory of the event. The client's actual memory of the event must be distinguished from what the client has been told about the event. By the time the client sees the neuropsychologist (possibly months or years after the event), the client may have learned a great deal about what happened in the injury. They may confuse this knowledge of the event with actual memory of the event, and the clinician must take great care to differentiate between the two. The extent to which the client has posttraumatic amnesia (lack of memory for events after the injury) serves as one way to rate the severity of the event. Lastly, the duration of time that the client was unconscious can serve as another gauge of the injury severity. This is always hard for the client to estimate, but gross estimates are often enough for this purpose. A loss of consciousness of 30 min or less is considered a mild head injury, whereas loss of consciousness of more than 30 min is considered a moderate or severe brain injury, according to the Mild Traumatic Brain Injury Committee of the Head Injury Interdisciplinary Special Interest Group of the American Congress of Rehabilitation Medicine (1993).

Along with establishing the severity of the brain injury, another priority of the clinical interview for a client with TBI is to reconstruct the history of the event. The astute neuropsychologist performs this through a combination of reviewing medical records of the event, interviewing the client, and interviewing his or her caregivers. The neuropsychologist must know the nature of the injury and the location of damage to assess what cognitive abilities may be affected by the injury. Head injuries can be divided into two types: penetrating head injuries, in which a foreign object (termed a *missile*) enters the brain, and closed head injuries, in which the skull remains largely intact and no foreign object enters the brain. These two types of head injuries are associated with certain neuropathological processes that must be understood when evaluating a client with TBI. The neuropsychologist must also know if certain parts of the brain were affected more than other parts, to assess what cognitive abilities may have been affected. For example, if the left hemisphere was damaged in an injury, the neuropsychologist would know that a detailed assessment of language is in order. If the left hemisphere was largely unscathed in the injury, the neuropsychologist would need to spend less of the client's time evaluating language abilities. Different locations in the brain correspond to different cognitive abilities, and the neuropsychologist's knowledge of the client's specific injury should be combined with knowledge of general neuroanatomy to surmise what cognitive abilities may have been affected and thus which should be evaluated.

Another large area to consider in the interview with a person with TBI is the changes that have occurred in their functioning since the accident. It is important to compare their functioning after the accident to their functioning before the accident. Oftentimes the clinician will find that problems that have been present since the injury were actually present before the injury, and thus are likely not to be an effect of the injury. For example, a client may have difficulty maintaining employment since an injury, but this may represent baseline functioning for her or him. Some of the standard components of any diagnostic interview should be assessed in clients with TBI: medical history, occupational or academic functioning, substance use, psychiatric functioning, social functioning, etc. The clinician should assess for *changes* in these domains. Hence, clinicians should inquire how these areas were before the accident in addition to how they have been since the accident.

This was an introduction to conducting an interview with clients with a history of TBI. TBIs are similar to other clinical situations in which the client has a known history of something that can cause brain damage. Other situations like this are a history of stroke, Parkinson's disease, AIDS, brain tumors (adult and pediatric), and pediatric problems such as cerebral palsy or fetal alcohol syndrome. With these conditions, the clinician is charged with evaluating the effects of this known condition on cognitive and behavioral functioning. Common elements to the interview for these conditions are that the clinician must assess functioning both before and after the neurological event (with the exception, of course, of problems present since birth), and that the clinician should seek information both from the client and his or her caregivers.

6.2.6 Dementia

The discussion will now turn to evaluation of problems in which a neurological condition is only suspected, rather than known. In these situations, a neurological condition may or may not be present. The neuropsychologist first must determine whether cognitive dysfunction is present. If it is present, only then does the neuropsychologist need to link the current problems to underlying brain dysfunction. The most common example of this situation is the evaluation of suspected dementia. Another example is the evaluation of suspected mental retardation or learning disabilities in children. For mental retardation or learning disabilities, it may be impossible to arrive at an etiology of deficits, but the client can still be helped by the evaluation. Our understanding of dementia, however, is advanced enough that clinicians can usually establish with reasonable certainty the underlying cause of the cognitive deficits.

Before proceeding, a student of neuropsychology should understand the differences between what are considered "cortical" dementias and "subcortical" dementias.

A helpful review of this terminology is provided by Kaufer and Cummings (2003) and Lezak et al. (2004). This nomenclature provides more of a conceptual guideline and does not always reflect clinical reality, but is nonetheless useful for students to understand for the purposes of diagnosing causes of dementia accurately. Cortical dementia involves cerebral cortical regions (i.e., more of the outer surface of the brain), whereas subcortical dementias are related to areas below the cortex, such as the basal ganglia, thalamus, and the brainstem. The main type of cortical dementia is Alzheimer's disease. Subcortical dementias, on the other hand, include Parkinson's disease, Huntington's disease, progressive supranuclear palsy, and subcortical vascular disease. Mixed cortical/subcortical dementias include frontotemporal dementia and dementia with Lewy bodies. Cortical, subcortical, and mixed dementias present with different symptoms that can be assessed in part during the interview. It is important to be able to distinguish between these two classes of dementias, because information obtained in the interview can be used to generate hypotheses to evaluate with test data. A summary of differences between the two categories of dementia is presented in Table 6.2.

Interviews should be conducted with both the client and a collateral source of information. However, when the client is clearly cognitively impaired, or uncooperative, the neuropsychologist must obtain this information solely from the caregiver. Either way, the areas of information discussed below should be obtained from both sources to the extent possible.

Interviews with clients suspected of having dementia should start with assessing the client's knowledge of the reason for referral, as outlined above. The interview should also include discussion of specific cognitive difficulties the client or their caregiver has noticed. This should start by asking the client what sort of problems they have been experiencing. Clinicians should probe for examples of cognitive difficulties, which can be elucidating. The caregiver may provide a response such as "well, for example, yesterday he asked me five times if I've paid the electric bill." If the caregiver is unable to explain what difficulties the client is having, or to generate examples, one helpful way to elucidate this information is to ask "Let's say you had to leave town for a few days. Would you feel safe leaving your loved one at home alone?" This often can lead the caregiver to give specific examples of the client's difficulties. For example, this may lead the caregiver to say "No, there's no way I could leave him home alone. He would forget to turn the stove off and to take his medications!" If the client or caregiver cannot independently generate examples of everyday problems, then the neuropsychologist can offer examples to see if the client shows these problems. Examples of everyday manifestations of cognitive problems can be gleaned from the Everyday Cognition Scale, mentioned previously, by Farias et al. (2008).

The main cognitive area to inquire into during the evaluation of dementia is memory functioning. The hallmark of Alzheimer's disease is impaired ability to remember information after a delay. This can manifest in everyday life as forgetting conversations, repeating statements, misplacing items, or forgetting one's intentions while driving or entering a room. The clinician should inquire with the client and his or her caregiver whether the client has displayed symptoms such as these.

If the client seems to have difficulty learning new information (e.g., what the plans are for the upcoming weekend), but seems to retain the little that is learned, this could suggest another process such as a subcortical dementia.

Another cognitive area to explore is language functioning; for example, how well does the client understand what is spoken to her or him? Does the client have trouble thinking of the right word to say in conversations, or have difficulty speaking in general? If difficulty is reported in these areas, it could be due to a process involving the left frontotemporal area, such as primary progressive aphasia or vascular damage to this area, and may be independent of Alzheimer's disease. Another area to cover is executive functioning, which is defined in many different ways. Some everyday skills that can be categorized as executive functioning include appropriate social behavior (e.g., inhibiting oneself from offensive behaviors), initiating appropriate activity during one's day (e.g., preparing healthy meals, keeping up with bills), and planning ability (e.g., structuring a day's errands in an efficient manner). Impairments in these abilities may reflect damage to the frontal lobes, caused by frontotemporal dementia, vascular damage to this area, or advanced stages of Alzheimer's disease. For example, one frontotemporal dementia client began a new behavior of shoplifting small items like cookies and candy bars, and became hostile to a security guard when caught. Sometimes clients can report that their skills in general are fine but that everything they do takes longer than it used to. This slowness of processing can be extremely disabling, and can be frustrating and embarrassing when trying to engage in conversation with others. Slowed processing speed can be due to disorders of the basal ganglia such as Parkinson's disease or progressive supranuclear palsy, strokes in specific locations (i.e., "strategic" infarcts), or other subcortical processes.

There are several elements of the history of the presenting problem that should be assessed in clients suspected of having dementia. The history of onset of symptoms

Table 6.2 Clinical characteristics of cortical and subcortical dementias that can be assessed in a neuropsychological interview

	Cortical dementias	Subcortical dementias
Location of neuropathology	Outer cortex	Basal ganglia, thalamus, brain stem
Disease types	Alzheimer's disease	Parkinson's disease, Huntington's disease, progressive supranuclear palsy, subcortical vascular disease
History of onset	Insidious	Insidious, or possibly sudden with vascular disease
Course	Progressive	Progressive or constant
Memory	Storage deficit	Retrieval deficit
Processing speed	Preserved	Impaired
Naming	Impaired	Preserved, except for certain locations of vascular damage
Awareness	Can be impaired	Preserved
Motor features	None	Tremor, choreiform movements, rigidity

is essential information. How long have the problems been present? If they have developed gradually over a year or more, the symptoms may be due to Alzheimer's disease (AD). Sometimes symptoms of AD are present for months or years but not prominent until some crisis occurs. The "crisis" could be a family vacation, death in the family, medical situation, or other situation outside of normal functioning in which the client was pushed beyond her or his capabilities. Often, the client or family cannot pin down a specific time that symptoms began. Vascular dementia, on the other hand, tends to begin with a specific event such as a stroke or myocardial infarction. Clients with vascular dementia tend to have vascular diseases in their medical history, such as hypertension, diabetes, or atrial fibrillation, but these diseases can be present in clients with other types of dementia.

The *course* of symptoms should also be assessed. Clients with vascular dementia theoretically have a stepwise course of decline, in which they are stable for some time, then decline, then are stable, then decline again. AD, on the other hand, is characterized by a gradual decline. In reality, clients with vascular dementia often do not fit into this category, and clients with AD often show a steep decline after an abnormal event (e.g., a hospitalization), but the clinician should nonetheless be aware of these probable differences in course. Clients who show variability in symptoms throughout the course of the day may be suffering from Lewy Body dementia although our understanding of this disease is quite limited.

Neuropsychologists are often requested to evaluate whether an older adult is experiencing symptoms of depression or dementia, or both. During the interview, several factors can help to answer this question. Older adults with depressive symptoms are often aware of memory problems, or even exaggerate problems that may not even be present. Clients with dementia, on the other hand, are often unaware of their cognitive difficulties. Another obvious but important thing to assess is current and past history of depressive symptoms. This can help elucidate whether current depressive symptoms are contributing to cognitive impairment.

The clinician should ensure that the interview is ended appropriately. Donders (2005) points out that it is often useful to summarize the main concerns noted in the interview, assess for correctness with the client, and then ask the client if there are any other concerns the client would like to add or questions he or she would like to ask before proceeding with the evaluation. One benefit to this is that the client may mention something that the clinician may have neglected to inquire into. The clinician should also expect that there will be questions she or he forgot to ask, and that these questions can be asked later in the evaluation, or even over the phone on a later date.

6.3 Conclusion

It should be clear after reading this chapter that the clinical interview is an essential part of the neuropsychological assessment process. It is also a complex set of skills that takes years of experience to master. Students should seek out opportunities to observe multiple experienced clinicians conducting interviews to develop this skill, and to glean aspects of multiple clinicians' styles of interviewing. This, combined with experience conducting multiple interviews, will enable the clinician to learn this valuable skill.

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Chapter 7
Anxiety Disorders

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7.1 Description of the Disorders

Anxiety disorders are among the most common psychological disorders, with a lifetime prevalence of 31.2% and a 12-month prevalence of 19.1% in the United States (Kessler et al., 2005; Kessler, Chiu, Demler, Merikangas, & Walters, 2005). Individuals with an anxiety disorder present with a variety of physical and psychological symptoms. Particularly unique to anxiety are the symptoms of physical tension and apprehension about the future (Barlow, 2002). Anxiety disorders typically begin in childhood or early adolescence (Inderbitzen & Hope, 1995; Liebowitz, Gorman, Fyer, & Klein, 1985; Macaulay & Kleinknecht, 1989; Rasmussen & Eisen, 1990; Warren & Zgourides, 1988) and may follow a chronic course into adulthood (Albano, Chorpita, & Barlow, 1998).

Anxiety disorders are highly comorbid with other psychological disorders, particularly mood disorders (Brown & Barlow, 2002; Brown, Campbell, Lehman, Grisham, & Mancill, 2001; Kessler, 1997). In a large scale study of 1,127 patients, Brown and colleagues (2001) found that 55% of the patients given a primary diagnosis of an anxiety or depressive disorder currently had at least one or the other anxiety or depressive disorder. Anxiety disorders also commonly co-occur with substance use disorders (Kessler et al., 1996). The breath of comorbidity surrounding anxiety disorders complicates the diagnostic process, such that a detailed knowledge of both anxiety disorders and their commonly co-occurring conditions is essential to arriving at an accurate diagnosis. Specifically, anxiety disorders and mood disorders have a notable amount of symptom overlap (e.g., anticipating the

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worst, worry, guilt, fatigue, crying, hopelessness, etc.). These symptoms, more broadly termed *negative affect*, are common to both anxiety and depression (Brown et al., 1998; Tellegen, 1985).

Shared symptoms of *negative affectivity* may complicate the differential diagnosis between depression and anxiety. To facilitate this differential diagnosis, research has identified symptoms specific to fear and anxiety that appear to be distinct from general negative affectivity (Zinbarg et al., 1994). As such, assessment of anxiety disorders should incorporate understanding that negative affectivity is shared between anxiety and depression, and that anxiety is typically characterized by relatively elevated autonomic arousal (e.g., tachycardia, palpitations, chest pressure, choking; Zinbarg et al.), whereas depression is typically characterized by anhedonic symptoms (e.g., helplessness, depressed mood, anhedonia, suicidal ideation; Zinbarg et al.). In unclear cases, identifying signs of "pure" anhedonic symptoms or "pure" physiologic arousal (i.e., symptoms of autonomic arousal) may aid in an accurate diagnosis. Table 7.1 lists symptoms of anxiety, physiologic arousal, depression, and the shared symptoms of depression and anxiety (negative affect).

Anxiety disorders are comprised of both motoric and psychological symptom clusters according to the *Diagnostic and Statistical Manual of Mental Disorders*

Table 7.1 Anxiety symptoms, depression symptoms signs of physiologic arousal, and the shared depressive and anxious symptoms (negative affect)

Anxiety	*Negative affect*
Apprehension	Worry
Tension	Poor concentration
Feeling "on edge"	Irritability
Trembling	Hypervigilance
Excessive worry	Unsatisfying sleep
Nightmares	Crying
	Guilt
	Fatigue
	Poor memory
	Middle or late insomnia
	Feelings of worthlessness
	Hopelessness
	Early insomnia
Depression	*Physiological arousal*
Helplessness	Rapid heart beat
Depressed mood	Palpitations
Loss of interest	Chest pressure
Lack of pleasure	Choking
Suicidal ideation	Dizziness
Diminished libido	Feeling faint
	Pricking sensations
	Chest pain
	Difficulty swallowing

Adapted from Zinbarg et al., 1994

[DSM-IV-TR; American Psychiatric Association (APA), 2000]. These basic physiologic and psychological processes may be characterized as either fearful or anxious in nature (Barlow, Brown, & Craske, 1994). What may aid in the differential diagnosis between anxiety disorders is the particular configuration of anxious versus fearful symptom presentations. For example, generalized anxiety disorder (GAD) is characterized by the absence of a fear response, whereas the diagnosis of panic disorder requires that the patient experience an uncued, fearful response (Barlow et al., 1994). While the specific diagnostic criteria for anxiety disorders will be discussed in the next section, the distinction between fear and anxiety will be discussed here, given its overarching centrality to accurate differential diagnosis within the anxiety disorders.

Anxiety has been defined as a future-oriented, negative mood state that involves symptoms of physical tension and apprehensive expectation (Barlow, 2002). As such, anxiety is a motoric and physiologic response to a perceived lack of control over upcoming negative events. Fear, on the other hand, is defined as an immediate emotional response to the perception of present danger (Barlow). This emotional response, characterized by activation of the autonomic nervous system, is marked by strong arousal and action tendencies (Barlow et al., 1994). The two most critical differences between anxiety and fear for the current discussion pertain to: (1) time course and (2) the presence or absence of autonomic arousal. Anxiety is future oriented and can occur in the absence of psychophysiologic arousal. Conversely, fear is a response to a current threat characterized by the activation of the autonomic nervous system [i.e., fight or flight response (Barlow & Mavissakalian, 1981)]. With these relatively general characteristics that inform differential diagnosis between anxiety disorders in mind, specific anxiety disorders and related factors will now be considered in greater detail. We have divided the anxiety disorders into those primarily characterized by a fear-based response (i.e., autonomic arousal), and those primarily characterized by an anxious response. This distinction is also reflected in the organization of the decision making tree (see Fig. 7.1). It should be noted that posttraumatic stress disorder (PTSD) and acute stress disorder (also categorized as anxiety disorders) will be covered in another chapter.

A *panic attack* is a “discrete period of intense fear or discomfort in the absence of real danger which is accompanied by at least 4 of 13 somatic or cognitive symptoms” (APA, 2000, p. 430). These symptoms develop abruptly and reach a peak within 10 min. Panic attacks are either unexpected (uncued), situationally bound (cued), or situationally predisposed (APA); thus, panic attacks are a type of fear response (i.e., characterized by elevated autonomic arousal). While a “panic attack” is not recognized as a disorder, it is important diagnostically in many of the anxiety disorders. Many patients presenting with fear or anxiety will use the term “panic attack” in lay vernacular. It is important to ascertain if the patient is describing a discreet fear response or simply describing anxiety in a common way. Moreover, it is important to determine if the fear response is triggered by a specific situation or if they are uncued, as the symptom context has important implications for differential diagnosis. Whereas an uncued (“out of the blue”) panic attack is likely indicative

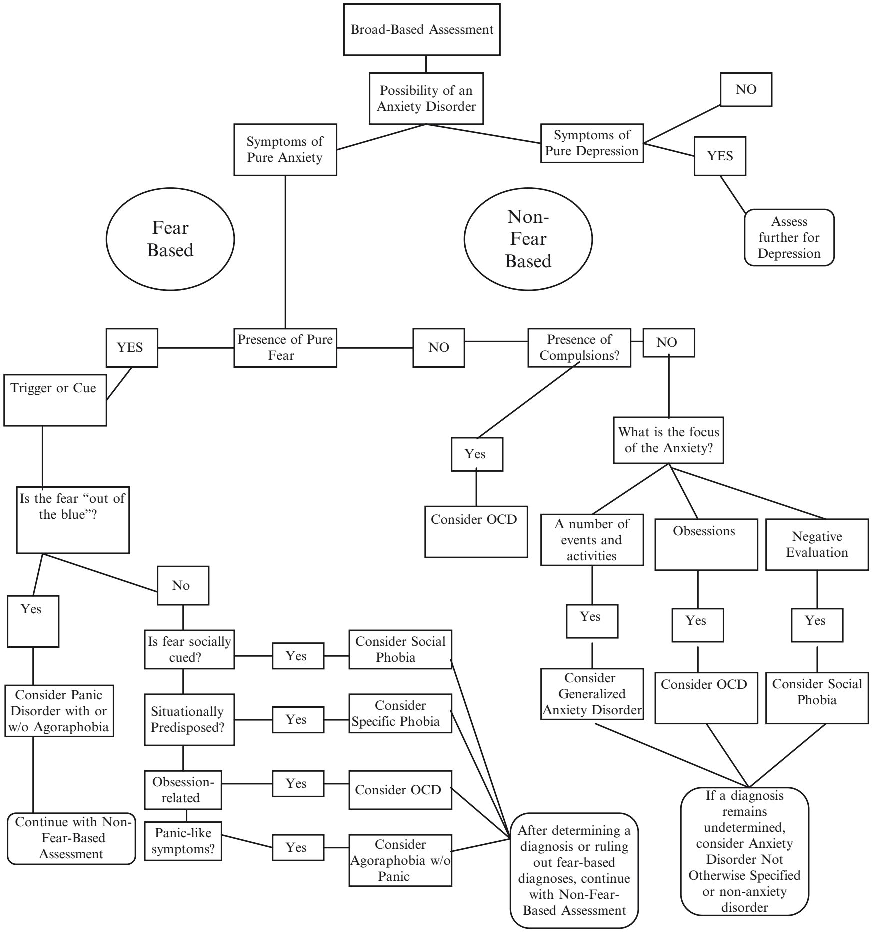

Fig. 7.1 A guide to key decision points regarding anxiety-related differential diagnoses

of panic disorder, a panic attack cued by a specific situation (e.g., public speaking) may indicate the presence of another anxiety disorder in which panic attacks often occur (i.e., social phobia, specific phobia, obsessive compulsive disorder).

7.1.1 Disorders Typically Characterized by a Fear-Based Response

The key feature of *panic disorder* is the presence of recurrent, unexpected (uncued) panic attacks. Panic attacks must be accompanied by one month or more of at least one of the following (a) persistent concern about having attacks; (b) worry about the implications of the attack or its consequences (e.g., losing control, having a heart attack, or "going crazy"); or (c) a significant change in behavior related to the attacks (APA, 2000). While panic disorder may be characterized by anxiety (e.g., worry about having another panic attack), the central component of panic disorder (i.e., recurrent panic attacks) is a fearful psycho physiologic response. Thus, panic disorder may be categorized as a disorder primarily characterized by fear. Panic disorder may occur with or without the presence of *agoraphobia*. Agoraphobia is defined as "anxiety about being in places or situations from which escape might be difficult (or embarrassing) or in which help may not be available in the event of having an unexpected or situationally predisposed panic attack or panic-like symptoms" (APA, p. 433). Agoraphobia may be characterized by avoidance of activities such as driving, traveling over bridges, traveling on airplanes, being home alone, or being in an elevator (APA). Agoraphobia rarely occurs in the absence of previous panic attacks and has come to be viewed by many scholars as conditioned avoidance of situations that are thought to elicit a panic attack (Barlow & Craske, 1988; Klein & Klein, 1989). As such, agoraphobia is viewed as diagnostically secondary to panic attacks (APA). However, *agoraphobia without history of panic disorder* may be diagnosed when agoraphobia is not accompanied by panic attacks (APA). Individuals with this diagnosis fear the occurrence of panic-like symptoms (including any of the symptoms of a panic attack) or other debilitating physical symptoms (e.g., loss of bladder control, vomiting), but have never met criteria for panic disorder.

Specific phobias are defined as "marked and persistent fear of clearly discernible, circumscribed objects or situations" (APA, 2000, p. 443). Exposure to this feared object or situation must provoke an immediate fear response. In addition, the individual must: (1) recognize that the fear is unreasonable (in children this feature may be absent), (2) avoid phobic situations or endure the situation with extreme distress, and (3) experience significant distress or impairment in functioning due to avoidance of the phobic situation, anxious anticipation, or distress in the feared situation. In order to receive the diagnosis of a specific phobia, the immediate fear response, phobic avoidance, or anxious anticipation must not be better accounted for by another mental disorder (e.g., PTSD, obsessive compulsive disorder, social phobia, etc.). Individuals with specific phobia may experience some generalized anxious anticipation under conditions in which exposure to the feared stimulus is more likely to occur (e.g., when a person who is fearful of rats passes by a dumpster). However, these individuals do not typically present with pervasive anxiety, as the fearful or phobic reactions indicative of specific phobia are circumscribed to specific objects or situations (APA). Thus, specific phobia may be characterized by a fear-based (i.e., autonomic arousal) response. Specific phobias are categorized as: animal type, natural environment type (e.g., heights, storms, water), blood-injection-injury type, situational type (e.g., elevators, airplanes, enclosed places), or other types [(e.g., fear of choking or vomiting, contracting an illness, in children fear of loud sounds or costumed characters) APA].

Social phobia is a "marked and persistent fear of social or performance situations in which embarrassment may occur" (APA, 2000, p. 450). The individual must (1) almost invariably experience fear upon exposure to the feared social situation, (2) recognize that the fear is excessive or unreasonable (in children this feature may be absent), (3) the feared social situation is avoided or endured with extreme anxiety or clinically significant distress, and (4) avoidance and/or anticipation of the feared social situation causes distress and clinically significant impairment (APA, p. 456). Exposure to the feared social situation provokes symptoms of fear (e.g., sweating, racing heart, dizziness,), anxiety (e.g., diarrhea, muscle tension), and/or a situationally bound panic attack. Social phobia may be characterized by a fear-based response as exposure to the feared stimulus (e.g., eating in front of others) generally provokes an autonomic response. In some cases, this fearful response may meet criteria for a panic attack (APA). Individuals with this diagnosis may also fear specific social situations (e.g., public speaking, urinating, eating, or writing in public) or they may fear most social situations. In the latter case, the individual is given the diagnostic specifier of *generalized* (APA). Unlike those with generalized social phobia, individuals with nongeneralized social phobia are able to function in at least one general social domain without distress or anxiety (Heimberg, Holt, Schneier, Spitzer, & Liebowitz, 1993). Social phobia is centered around the fear of negative evaluation, as those with the disorder are generally able to perform tasks (e.g., writing, speaking, urinating) without anxiety when they are alone. In individuals under the age of 18 years, the duration of these symptoms must last for at least 6 months (APA).

7.1.2 Disorders Primarily Characterized by an Anxious Response

The core features of *obsessive-compulsive disorder* (OCD) are recurrent obsessions or compulsions. Obsessions are "persistent ideas, thoughts, impulses, or images that are experienced as intrusive and inappropriate and that cause marked anxiety or distress" (APA, 2000, p. 457). Obsessive thoughts and impulses are beyond excessive worry about real-life problems. In addition, the individual attempts to control these thoughts and impulses with some other thought or action. Obsessions are distinguished from thought insertions or delusions, such that individuals are able to recognize the obsessional thoughts are a product of his or her own mind (APA). Compulsions are "repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that function to prevent or reduce anxiety or distress, not to provide pleasure or gratification" (APA, p. 457). While a circumscribed panic attack may occur in individuals with OCD when confronted with a feared stimuli (i.e., attempting to resist obsessions and compulsions), this disorder is typified by excessive anxiety about the content of obsessions. Thus, OCD may be characterized by an anxious response. Generally, compulsive behaviors are aimed at reducing distress or anxiety that accompanies an obsession or to prevent future, negative events. Thus, obsessive behaviors or mental acts are "not connected in a realistic way with what they are designed to neutralize or prevent or are clearly excessive" (APA, p. 462). Adult individuals with OCD generally recognize that obsessions or compulsions are unreasonable (this may not be the case for children).

Nonetheless, the obsessions and compulsions cause marked distress, take up more than one hour per day, or significantly interfere with the individual's psychosocial functioning (APA). OCD is not diagnosed if another Axis I disorder is present and the content of the obsessions or compulsions is limited to this other disorder [(e.g., preoccupation with a particular part of the body in the case of body dysmorphic disorder, preoccupation with food in the presence of an eating disorder) APA].

Generalized anxiety disorder (GAD) is a pattern of pathological worry and anxiety, about a number of events or activities, occurring more days than not for a period of at least 6 months. Individuals with GAD find it difficult to control or stop the anxious apprehension (APA, 2000). GAD is the prototypic disorder that is characterized primarily by anxiety, as no fear-based (i.e., autonomic arousal) responses are considered to be symptoms of GAD. The diagnostic criteria (APA) specify that anxiety in GAD is associated with three or more of the following symptoms (1) restlessness; (2) susceptibility to fatigue; (3) difficulty concentrating or mind going blank; (4) irritability; (5) muscle tension; or (6) sleep disturbance (APA, p. 476). Broadly, individuals with GAD worry about everyday, minor life events (e.g., family, finances, punctuality, household work, etc.) and are more likely than individuals with other anxiety disorders to answer "yes" to the question "Do you worry excessively about minor things?" (Sanderson & Barlow, 1990). As such, GAD phenomenologically differs from panic disorder (i.e., worry is not about having a panic attack), social phobia (i.e., worry is not about social evaluation), or any other domain-specific anxiety otherwise covered in the DSM-IV-TR (APA).

7.2 Procedures for Gathering Information

The clinical interview allows for the gathering of information to make an accurate diagnosis. The interview also facilitates case conceptualization and rapport building (this is especially important when the interviewer will serve as the primary clinician). The clinician should also not rely solely on the information independently provided or immediately endorsed by the client during a clinical interview. Many factors may prevent valuable information from being reported. Clients are often unaware of the relations between symptoms and may not voluntarily provide information if they do not believe it is relevant. For example, clients frequently believe that physical symptoms are unrelated to psychological difficulties. Similarly, clients vary in level of insight regarding the functional nature of their actions. If avoidant behaviors successfully reduce a client's anxiety, he or she may not consider them to be problematic and therefore, may not mention them to the clinician. In order to obtain the most accurate information, clinicians should employ a combination of open-ended and close-ended questions. If a client appears to have a tendency to either over or underendorse symptoms, the clinician can compare (and weight if needed) responses to these two formats.

The clinical interview should also consist of behaviorally specific questions in understandable language. Many clients may have inaccurate understandings of symptoms based on lay interpretations. As mentioned previously, many clients will report that they have experienced "panic attacks" using a lay definition of panic. While many of these reports are accurate, others use the term to apply to any situation of extreme distress without referring to the specific constellation of symptoms that meets the criteria for a panic attack. Behaviorally specific questions are also useful when information is needed about symptoms that are viewed negatively by society or that the client may find embarrassing. While clients are often hesitant to volunteer sensitive information, many will acknowledge its presence when asked directly. For example, individuals with social anxiety may experience a lot of anxiety related to the perceived presence of or other focused attention paid to bodily functions such as sweating or digestion. Finally, it is important that clinicians obtain information about the context in which symptoms develop. Contextual information provides invaluable information regarding differential diagnosis, particularly when symptoms characteristic of one anxiety disorder present exclusively in the presence of another anxiety disorder (e.g., a person who avoids social situations because of a fear of judgment, indicative of social anxiety, or harm, potentially indicative of PTSD, rather than of panic-like symptoms which would be consistent with agoraphobia). Overall, when conducting a clinical interview to assess anxiety, the clinician should strategically utilize specific questions to assess for the presence and absence of anxious symptoms, obtain an understanding of symptom-related context, and consider the function the symptoms play in the client's life.

There are several ways in which a diagnostic interview can be supplemented to improve the overall quality of an assessment. Specifically, assessments that are multimodal (e.g., assessing both cognitive and behavioral symptoms), multimethod (i.e., utilizing multiple instruments), and multi-informant, bolster the content validity of a given assessment, and may enhance the quality of the data gathered. For example, a multimodal assessment will provide the clinician with data regarding unique anxiety-related behaviors (e.g., avoiding public places) in addition to anxiety-related cognitions (e.g., fear of negative social evaluation). A multimethod assessment will also aid the clinician in capturing unique diagnostic issues across multiple domains (e.g., using self-report measures and direct observation of behavior), and will aid in capturing unique diagnostic issues across multiple environments (Eifert & Wilson, 1991). Finally, the use of multiple-informants (e.g., the patient and his or her spouse) may reduce levels of error variance caused by a respondent's individual bias (Haynes & O'Brien, 2000).

Finally, a thorough diagnostic interview addresses possible comorbid conditions and the potential functional overlap between these conditions and anxiety disorders. Other co-occurring conditions may maintain or aggravate symptoms of an anxiety disorder. For example, a thorough diagnostic interview may reveal that a patient meets criteria for both panic disorder and alcohol dependence. As more data is gathered by the clinician, it becomes clear that factors related to alcohol dependence (e.g., withdrawal symptoms) may function as bodily cues that elicit panic. Therefore, in addition to providing information about concurrence, a thorough diagnostic interview should obtain useful information about the functional relations between the co-occurring diagnoses and their respective symptoms (Hayes, Nelson, & Jarrett, 1987).

7.3 Case Illustrations

Gina: Worried Sick. Gina was a 44-year-old Caucasian woman with three children (two boys, aged 11 and a daughter, aged 16). She was married to her husband of 20 years. Gina began experiencing difficulty sleeping, muscle tension, and irritability, and went to her primary care physician for an evaluation. After finding no evidence of an organic cause of her symptoms, her physician referred her for psychological evaluation.

Upon meeting with her clinician, Gina stated that she was exhausted. She stated that she frequently stayed up late into the night, unable to fall asleep. Gina reported that she had become increasingly worried about several important areas in her life. She worried that her daughter was going to go far away to college and would soon "write the family off," become injured, or get into trouble. In addition, she worried about the family's finances. Though her husband had a well-paying job (a manager for a local grocery store chain), Gina worried that sending the children to college would prove to be "financial ruin." Gina also reported some marital discord. She reported that she and her husband had been fighting about his unpredictable hours at work. If her husband did not arrive home on time, Gina became preoccupied with his whereabouts. Though her husband was never more than 40 min late, Gina regularly worried that he had been in a car accident or was having an affair. Gina noticed that during these times of preoccupation she was likely to lose track of the task at hand (e.g., burning dinner, leaving the iron on, or forgetting perishable groceries in the car).

Gina reported that her sleep problems and muscle tension increased during times of heightened anxiety and worry. In addition to worrying about her family and finances, Gina was preoccupied with many day-to-day activities. She worried about getting her boys to school on time, forgetting specific items at the grocery store, and the health of the family pets. Gina reported that she was worried more than 70% of her day-to-day life. However, Gina stated that she maintained relatively sound health habits. She drank one glass of wine once or twice a week. She denied taking any recreational or prescription drugs. She also stated that she had a robust appetite, except during the times when she got an "anxious stomach," with diarrhea and abdominal pain.

Gina's clinician asked her to complete the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990) and the Worry Domains Questionnaire (WDS; Tallis, Eysenck, & Matthews, 1992), both self-report questionnaires useful in the assessment of GAD. Gina received a score of 68 on the PSWQ, a measure designed to assess an individual's tendency to worry excessively. Gina's clinician examined the extant research on the psychometric properties and clinical norms for the PSWQ (e.g., Fresco, Mennin, Heimburg, & Turk, 2003) and found that a score of 68 supports a diagnosis of GAD. Gina's tendency to worry about finances and relationships was also reflected in her responses to the WDS, a measure used to assess the specific domains about which an individual worries.

Gina's symptoms were consistent with a diagnosis of GAD. She experienced excessive anxiety and worry about a number of events or activities, and found it difficult to control the worry. In addition, consistent with the DSM-IV-TR (APA, 2000) definition of GAD, she experienced at least three of the following symptoms: restlessness, irritability, fatigue, muscle tension, difficulty concentrating, and sleep disturbances. Her worry was not better accounted for by another Axis I disorder (e.g., she was not worried about having a panic attack) and her anxiety was not caused by the direct physiologic effects of a substance or a general medical condition.

Jeremy: Terribly Timid. Jeremy was a 19 year-old college freshman who lived at home with his mother, father, and younger sister. He indicated that he sought services because he was experiencing intense attacks of fear and anxiety. Jeremy reported having discreet periods of fear during which he experienced shortness of breath, dizziness, sweating, and a rapid heart beat. His clinician noted that these symptoms met full criteria for experiencing panic attacks. Initially, Jeremy reported that his panic attacks occurred “all of the time.” He reported that he was currently failing school and in danger of losing his academic scholarship. He stated that his grades had been excellent in high school, but that he had always been “painfully shy.” He reported that his social anxiety had increased dramatically with the start of college. Jeremy told his clinician that he began avoiding going to class because his attacks of fear and anxiety seem to be worse on campus. He stated that he spent a good deal of time worrying about attending class and speaking in class.

During the first session, the clinician completed a structured clinical interview [the Anxiety Disorders Interview Schedule for DSM-IV (Brown, Di Nardo, & Barlow, 1994)], which revealed that Jeremy worried that he would say something “stupid” or that people might be “poking fun” at him in social situations. He stated that he knows that people “probably aren’t paying that much attention to me.” However, he still felt afraid. The interview revealed that Jeremy was afraid of any situation in which he might be subject to the focus of other’s attention or potentially subject to other’s negative evaluations. Jeremy stated that his social anxiety also occurred in other social arenas. He stated that he is very fearful of going shopping or to the library, meeting new people, and eating in the school cafeteria. Even phone conversations (e.g., making a doctor’s appointment or ordering pizza) caused him great anxiety and he tried to avoid these situations whenever possible. At the end of this session, Jeremy was asked to fill out a panic attack record (i.e., self-monitoring sheet on which he was supposed to record the times, locations, duration, triggering situation, and intensity of his panic attacks and anxiety) over the following week.

Jeremy came to his second session prepared with a completed panic attack record. Results of this self-monitoring sheet revealed that Jeremy’s panic attacks were situationally bound. His panic attacks appeared to occur during times of social interaction (e.g., attending class, checking out at the grocery store). Data from Jeremy’s panic attack record suggested that he was particularly prone to fear and anxiety in classes which required verbal participation. Jeremy’s panic attack record also revealed that he rarely attended classes in which he was expected to speak, participate in group-work, or give oral presentations.

Jeremy met criteria for social phobia, generalized. Jeremy presented with both fearful (e.g., panic attacks) and anxious symptoms (e.g., anxious apprehension about social interactions). As demonstrated by his panic attack record, Jeremy experienced an autonomic response to the perception of threat via social situations. Jeremy feared both public performance situations (e.g., speaking in class) as well as social interaction situations (e.g., meeting new people or going shopping). Exposure to social situations frequently provoked a panic attack and he recognized that this fear was unreasonable, yet he avoided these situations or endured them with great distress. Unfortunately, his fears and avoidance behavior had begun to interfere with his life such that he was unable to function in multiple situations (e.g., attend class, make friends, go grocery shopping).

7.4 Recommendations for Formal Assessment

A well-developed actuarial assessment method has been demonstrated to predict human behavior as well as or better than clinical judgment. That is to say, more accurate diagnoses are given if the human judge is eliminated and diagnostic conclusions are based upon empirically established relations among assessment data and the pathology of interest (Dawes, Faust, & Meehl, 1989). As such, effective procedures for gathering information generally involve finding the appropriate standardized measurement. Specific recommendations for actuarial assessment will be given in the section entitled “Standardized Interview Formats.”

There are several methods of assessment that compliment a diagnostic interview for anxiety disorders. Interview and assessment tools such as functional behavioral analyses, self-monitoring, self-report measures, behavioral tests, multiple informants, a medical evaluation, and a thorough consideration of frequently co-occurring diagnoses may be useful in a comprehensive assessment of anxiety disorders. Many of these assessment techniques, while insufficient to provide a diagnosis alone, are extremely useful in the differential diagnosis of anxiety disorders as well as the development of an idiographic representation of a given patient’s symptoms.

Functional behavioral analyses are useful in determining the relation between physiologic, cognitive, and behavioral components of fear and anxiety (Chorpita & Taylor, 2001). Functional analyses gather and synthesize data regarding the situational, cognitive, and behavioral components of an individual’s pathologic behavior (Haynes, Leisen, & Blaine, 1997). For example, a patient reports that he gets sweaty and his heart beats quickly (a fear response) in social situations, because he worries that he might say the wrong thing. Furthermore, the patient experiences a reduction in anxiety when social interactions are either avoided or escaped, thereby maintaining the avoidance behavior. This synthesis of the functional relationship between different types of information (i.e., the incorporation of the patient’s physiologic fear response, anxious cognitions, and avoidance behavior) may lead to a diagnosis of social phobia.

Self-monitoring typically refers to consistent monitoring of a particular aspect of a case, which aids in accumulating diagnostic information. This assessment technique generally involves the patient maintaining a continuous (e.g., daily or throughout the day) record of particular behaviors or symptoms of a disorder. Self-monitoring techniques have been described for many of the anxiety disorders and are a vital part of behavioral assessment (Barlow & Craske, 2000). For example, Craske, Barlow and O'Leary (1992) have described a Worry Record, and Borkovek, Hazlett-Stevens, and Diaz (1999) have utilized the Worry Outcome Diary in the assessment and treatment of GAD. In the case of panic disorder, measures such as the Daily Panic Attack and Anxiety Record measure the onset, severity, context, and phenomenology of panic attacks (Barlow & Craske). Self-monitoring forms have also been used in the treatment and assessment of social phobia and OCD (Feske & Chambless, 2000; Herbert, Rheinbold, & Brandsma, 2001). This assessment method is useful for both diagnostic assessment as well as continued measurement of natural variability in symptom levels and symptom change across the course of treatment. As an illustrative example, panic attack records may be completed on a daily basis to understand panic attack triggers as well as changes in panic attack severity or frequency across the course of treatment. The former would be very important in differential diagnosis as panic attack cues (e.g., uncued versus in response to a specific phobic stimulus) are employed in determining the most appropriate anxiety disorder diagnosis.

Self-report measures may also be useful in assessing an individual's particular symptomatic profile. A full review of all relevant self-report measures for anxiety disorders is beyond the scope of this chapter. Broadly, there are self report-measures for panic and agoraphobia that measure panic disorder severity, panic-related cognitions, anxiety focused on emotions or physical sensations, and measures of avoidance (White & Barlow, 2002; see Baker, Patterson, & Barlow, 2002 for a full review). Self-report measures have also been designed to assess the diagnostic criteria for GAD as well as the intensity and content of worry (Roemer, Orsillo, Barlow, 2002). Self-report measures of social anxiety have been employed in the assessment and research of social phobia (for a review, see Herbert, Rheingold, & Brandsma, 2001). With regard to the assessment of OCD, multiple questionnaires and rating scales have been developed to assess phenomenological facets of the disorder (e.g., checking, urges, worries, overimportance of thoughts, etc.) that can be helpful for monitoring treatment outcome or progression through treatment (for a full review, see Feske & Chambless, 2000).

Commonly used self-report measures for anxiety include the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988) and the State-Trait Anxiety Inventory (STAI; Spielberger, 1983). The BAI is a 21-item scale on which patients are asked to rank (from 0 to 4) how much a particular item (essentially anxiety symptoms) has bothered them in the past week (Beck et al., 1988). The STAI is a 22-item self-report form that measures both a person's tendency to perceive situations as threatening as well as an individual's anxiety in a particular moment in time (Spielberger). When choosing a self-report measure, the clinician should consider the scope of information desired (general or disorder specific), the psychometric properties of the measure (previously demonstrated reliability and validity), and available normative data. Clinicians should refer to previously published norms for interpretation of self-report measures and take into consideration any meaningful differences between their client and the normative sample (e.g., Antony, Orsillo, & Roemer, 2001).

Behavioral tests provide direct observation of the patient's anxiety response system and may be a useful assessment strategy. For example, the Behavioral Avoidance Test (BAT) is used to test the degree or severity of agoraphobic avoidance (Craske, Barlow, & Meadows, 2000). A common example of a BAT is one in which a patient is asked to select some of their most feared agoraphobic situations. The patient is asked to confront the feared situations. Patients are asked to rate their anticipatory anxiety (e.g., on a 0–10 scale) and levels of anxiety during the task every 30 s (Williams, 1985). While these tasks are subject to demand characteristics, they may be an important supplement to other assessment modalities, as patients tend to underestimate what they can actually accomplish (Craske, Rapee, & Barlow, 1988). Standardized BATs have also been developed for social phobia (e.g., Coles & Heimberg, 2000; McNeil, Reis, & Turk, 1995). Clearly, similar methods could be applied to the direct observation of the avoidance of any feared stimuli (e.g., specific phobia). BATs have been used less frequently in OCD (Steketee & Barlow, 2000); however, direct observation is nonetheless an invaluable assessment tool (Goldfried & Davison, 1994).

Another helpful assessment strategy is the use of multiple informants in the collection of diagnostic data. The use of multiple informants may reduce error variance (Haynes & O'Brien, 2000) and increase the amount of diagnostic data available to the clinician. Specifically, the use of an anxiety self-report scale is inherently skewed towards the bias of the respondent. Utilizing a second informant, the clinician is given access to the variability of the behavior across multiple contexts. Whereas the use of a multi-informant strategy has been frequently used in the assessment of children (e.g., Barkely Scales; Barkley, 2006), it is less common in adult assessment, perhaps due to the increased issues surrounding confidentiality. However, as long as a patient's right to confidentiality is respected, the use of multiple informants may enhance the depth of an assessment. For example, a spouse or close friend of the patient may speak of ways in which the disorder is interfering with the patient's psychosocial functioning (e.g., taking time away from friends and family, difficulty leaving the home).

Multiple medical conditions may cause anxiety symptoms. It is therefore important to gather data regarding the patient's medical history during the diagnostic interview. Many medical conditions may cause anxiety symptoms, including endocrine, cardiovascular, respiratory, metabolic, and neurological conditions (APA, 2000). For example, endocrine disorders (e.g., hypothyroidism) may be associated with affective instability and anxiety (Hall, Stickney, & Beresford, 1986). As such, a medical evaluation is the only certain way to ensure that the anxiety symptoms are not caused by a general medical condition (GMC).

7.5 Standardized Interview Formats

Several structured and semistructured interviews are available to assist in actuarial assessment of anxiety disorders. Examples of these instruments include the Anxiety Disorders Interview Schedule for DSM-IV (ADIS-IV; Brown, Di Nardo, & Barlow, 1994), the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I; First, Spitzer, Gibbon, & Williams, 1997), the Schedule for Affective Disorders and Schizophrenia—Lifetime Anxiety Version (SADS-LA; Fyer, Endicott, Manuzza, & Klein, 1985), the Mini International Neuropsychiatric Interview, (MINI; Sheehan et al., 1998), and the Composite International Diagnostic Interview (CIDI; World Health Organization, 1990).

The ADIS-IV is a commonly used, semistructured interview designed specifically to identify the presence of DSM-IV anxiety disorders and other co-occurring conditions. In addition to providing diagnostic information (i.e., the presence or absence of a given disorder), the ADIS-IV operates on the supposition that psychopathology falls along a continuum. As such, it provides dimensional assessment that goes beyond categorical, diagnostic information (Brown, 1996). It provides information about the presence or absence of a given diagnosis, as well as information about subthreshold symptom levels or the severity of the disorder. In addition, the ADIS-IV measures other clinically relevant considerations (e.g., substance use disorders), which play a significant role in subsequent assessment and treatment strategies. A lifetime version of the ADIS-IV is available, which provides diagnostic information about both current and lifetime disorders (the ADIS-IV-L; Di Nardo, Brown, & Barlow, 1994). Evidence suggests the ADIS-IV possesses good test-retest and inter-rater reliability (Brown, Di Nardo, Lehman, & Campbell, 2001).

The ADIS-IV interview is structured in a hierarchical fashion, such that symptoms essential to a disorder are queried first. This “initial inquiry” generally consists of dichotomous (i.e., “yes/no”) questions, which then guide the interviewer as to how to proceed throughout the diagnostic section. The measure begins with brief demographic and introductory sections. As the interview was designed to primarily assess anxiety disorders, the first diagnostic section addresses anxiety disorders and is followed by sections measuring mood disorders and some somatoform disorders (i.e., hypochondriasis and somatization disorder). Following this is a section that measures symptoms of mixed anxiety-depression disorder. The mixed anxiety-depression portion is not to be administered if the patient currently meets certain, manual-specified criteria (e.g., currently meets criteria for any anxiety disorder). Subsequently, the ADIS-IV includes measures for alcohol abuse/dependence, substance abuse, psychosis, family history of psychological disorders, medical history, and Hamilton Depression items (Di Nardo, Brown, & Barlow, 1994).

The SCID-I is a semistructured interview designed to identify the presence or absence of Axis I diagnoses. The SCID-I takes approximately 45–90 min to administer and may be used with either psychiatric or general medical patients (First et al., 1997).

Adequate reliability of the SCID has been demonstrated (Segal, Hersen, & Van Hasselt, 1994). The SCID-I begins with an open-ended interview, which gathers data regarding the current illness, and past episodes of psychopathology. This measure is divided into six modules: mood episodes, psychotic symptoms, psychotic disorders, mood disorders, substance use disorders, and anxiety and other disorders. These modules may be administered in any order. As such, the anxiety and other disorders module may be administered first when assessing for anxiety disorders (First et al.). The anxiety disorders module of the SCID-I begins with ratings for panic disorder, including measures for the presence of panic attacks. Following this, the SCID includes diagnostic sections for OCD and PTSD. The remainder of the anxiety disorders in this module (i.e., agoraphobia without history of panic disorder, social phobia, specific phobia, GAD, anxiety disorder not otherwise specified) are subsumed into one category (First et al.).

The Schedule for Affective Disorders and Schizophrenia-Lifetime Version, Anxiety Disorders (SADS-LA; Mannuzza, Fyer, Klein, & Endicott, 1986) is a modification of the Schedule for Affective Disorders and Schizophrenia (SADS; Endicott & Spitzer, 1978) to include the assessment of anxiety disorders. The SADS-LA is a structured interview schedule that was designed for the study of anxiety disorders and the relationship between the anxiety disorders. The SADS-LA covers both diagnostic criteria as well as some subthreshold symptoms.

The MINI (Sheehan et al., 1998) is a short diagnostic interview that is compatible with both DSM-IV and International Classification of Diseases-10 (World Health Organization, 1992) psychological disorders. The MINI was developed for use in clinical trials and epidemiological research. It can therefore be administered by interviewers with limited training (i.e., administration is not limited to trained mental health professionals). It is divided into 16 modules, each corresponding to a particular diagnostic category. The MINI takes about 15 min to administer, and covers the following anxiety disorders: panic disorder, agoraphobia, social phobia, OCD, specific phobia, GAD, and PTSD (Sheehan et al., 1998).

The CIDI (World Health Organization, 1990) is a fully structured diagnostic interview that can be administered by trained lay interviewers without clinical experience. This interview assesses for many facets of psychological health beyond particular diagnoses (e.g., risk factors, treatment, socio-demographics). The interview covers the following DSM-IV disorders: mood and anxiety disorders, substance abuse, and other disorders (e.g., intermittent explosive disorder, eating disorders). This interview is comprised of 22 sections, seven of which specifically assess anxiety disorders. The entire interview takes approximately two hours to administer (Kessler & Ustun, 2005; World Health Organization).

The CIDI was specifically designed for use in large scale epidemiological surveys (Kessler & Ustun, 2005). Clinical calibration of DSM-IV diagnoses in the CIDI is currently being conducted with the SCID (i.e., are the CIDI diagnoses consistent with the SCID), however, the results of these studies have not yet been published (Kessler et al., 2004). This interview was specifically designed for epidemiologic studies rather than idiographic diagnoses in a clinical setting.

7.6 Impact of Race, Culture, Ethnicity, and Age

A comprehensive diagnostic assessment should include consideration of sociodemographic influences. Included is an overview of findings regarding associations between sociodemographic characteristics and anxiety disorders. Individuals who make the decision to specialize in a particular anxiety disorder are strongly encouraged to become familiar with the sociodemographic findings related to that disorder on a more intricate level.

7.6.1 Sex

Anxiety disorders are generally more common in women than men (Pigott, 1999). This pattern appears to be consistent in childhood and adolescence, with a higher prevalence of anxiety disorders in girls than boys (Essau, Conradt, & Petermann, 2000; Romano, Tremblay, Vitaro, Zoccolillo, & Pagan, 2001). One exception to this pattern is that OCD symptoms may be more prevalent in male children and adolescents (Geller et al., 2001; Pigott, 1999). While still present, gender differences in adults tend to be smaller for social anxiety disorder and OCD compared to other anxiety disorders (Lang & Stein, 2001; Magee, Eaton, Wittchen, McGonagle, & Kessler, 1996). Findings regarding sex differences in older adult samples are less robust. Consistent with younger individuals, sex differences in panic disorder and agoraphobia have been reported in older adults (McCabe, Cairney, Vledhuizen, Hermann, & Streiner, 2006; Sheikh, Swales, Carlson, & Lindley, 2004). However, one epidemiologic study revealed that while females reported higher rates of social phobia in adulthood, gender differences were not present in a older adult (54+) group (Cairney et al., 2007). Gender differences in anxiety disorders do appear to be robust, although this may partially be moderated by age. These findings would suggest that more attention be paid to female respondents who will report more anxious symptoms. However, clinicians should also be sensitive to potential biases in reporting when assessing male clients. Masculine gender role socialization can lead to resistance to seeking psychological help and difficulty identifying and expressing emotional states (Cochran, 2005).

7.6.2 Age

Reviews of the extant literature suggest that separation anxiety and specific phobias have the earliest onset and are the most commonly diagnosed anxiety disorders in children (Bernstein, Borchardt, & Perwien, 1996; Kessler et al., 2005; Wittchen, Stein, & Kessler, 1999). Risk for the development of anxiety disorders increases with age, with many anxiety disorders developing in adolescence. Social phobia and OCD are two anxiety disorders that commonly develop in adolescence (Beesdo et al., 2007; Cairney et al., 2007; Fontenelle, Mendlowicz, & Versiani, 2006; Kessler et al., 2005; Magee et al., 1996), with panic disorder developing more so in early adulthood (Grant et al., 2006; Kessler et al., 2006; Weissman et al., 1997). Although overanxious disorder was found to be one of the more prevalent anxiety disorders in children (Bernstein et al.), its successor, GAD, most commonly develops in adulthood (Grant et al., 2005; Wittchen, 2002).

When diagnosing anxiety in childhood, it is important to consider age-appropriate modifications in diagnostic criteria. The DSM-IV TR (APA, 2000) includes several modifications of diagnostic criteria when diagnosing anxiety disorders in children. These modifications typically include the lack of a requirement to view their fears as excessive or unreasonable, expression of fear through developmentally appropriate behaviors (including crying, tantrums, freezing, or clinging), and the addition of chronicity requirements (APA). Recommendations for integrating the consideration of development into assessment in childhood include: consider development when choosing measures, use normative guidelines for interpretation of results, consider age differences in patterns of symptoms, and consider change in symptoms over time (Silverman & Ollendick, 2005). In addition to general developmental differences, disorders may have different presentations in children than adults. For example, a comparison of OCD in children, adolescents, and adults found differences in the content and number of obsessions and in hoarding compulsions (Geller et al., 2001). Children and adolescents reported higher rates of aggressive obsessions and hoarding compared to adults. Given the variance of cognitive and emotional development in children, it is generally recommended that parents and other significant adults serve as informants, in addition to the child patient. However, research has revealed that there is often high discordance between child and parent ratings (Silverman & Ollendick, 2005). In addition, teacher ratings are generally less helpful for diagnosing internalizing symptoms, such as anxiety, than they are for externalizing disorders (Silverman & Ollendick). It is especially important that clinicians carefully consider all information available and not rely on one source of information when assessing children.

Anxiety disorders are generally considered to be less common in older adults than younger adults (Alwahhabi, 2003; Flint, 1994; Gretarsdottir, Woodruff-Borden, Meeks, & Depp, 2004). Compared to other anxiety disorders, GAD is more commonly reported by older adults (Alwahhabi; Beekman et al., 1998; Flint, 2005). Despite the relatively higher prevalence, it is considered rare for an individual to develop GAD in older adulthood, suggesting that the prominence is likely related to the chronicity of the disorder. Examination of new occurrences of GAD among older adults reveals that the anxiety often develops in the context of a major depressive episode, leading to the suggestion that a separate diagnosis of GAD not be given unless it is clear that the anxiety is distinct from the depressive symptoms (Flint). Comparably, development of social phobia in older adults is rare (Cairney et al., 2007). One disorder that older adults may be at risk for developing is agoraphobia. One study reported that approximately 30% of the older adult respondents who met diagnostic criteria for agoraphobia in the previous year reported initial onset after the age of 54 (McCabe et al., 2006).

One explanation for the lower prevalence of anxiety disorders in older adults is that older adults may experience and present anxiety differently than younger adults (Kogan, Edelstein, & McKee, 2000). In addition, clinicians should be cautious when interpreting self-report measures, as many of the common measures have not been tested in older adult samples and studies have revealed that some measures are less psychometrically sound when used with older adults (see Kogan et al. for a review). For example, a study examining the assessment of GAD revealed that the fatigue and irritability symptoms represented different things for older participants than younger participants (Kubarych, Aggen, Hettema, Kendler, & Neale, 2008). Specifically, older participants, on the whole, endorse greater tiredness and less irritability than younger participants. Results also revealed that tiring easily becomes more discriminating with age, and irritability becomes less discriminating with age (Kubarych et al.).

Whereas some differences in presentation between older and younger adults have been reported, findings examining social phobia and panic disorder suggest that symptom profiles for these disorders are generally similar in older and younger adults (Gretarsdottir et al., 2004; Sheikh et al., 2004). Given the increase in physical symptoms associated with old age, it is important to consider the physical health of an older adult when diagnosing an anxiety disorder (Alwahhabi, 2003; Kogan et al., 2000). Many of the anxiety disorders contain somatic symptoms as criteria that could be related to health problems or medication side effects. Medical conditions such as metabolic or endocrine disorders, degenerative disorders, dementia, brain tumors, illnesses affecting the sympathetic nervous system (e.g., hypertension, diabetes), heart disease or angina, and gastrointestinal disorders are associated with symptoms consistent with anxiety (Alwahhabi; Kogan et al.). Obtaining a detailed medical history and information regarding the temporal relations between physical and anxious symptoms is especially important when working with older adults.

7.6.3 Race, Ethnicity, and Culture

Prevalence rates of anxiety disorders appear to vary across race/ethnicity. Within the United States, epidemiological data has revealed that both Hispanic and non-Hispanic Blacks report lower lifetime prevalence of anxiety disorders than non-Hispanic Whites (Breslau, Kendler, Maxwell, Aguilar-Gaxiola, & Kessler, 2005; Himle, Baser, Taylor, Campbell, & Jackson, 2009; Kessler et al., 2005). However, when examining 12 month prevalence within individuals positive for lifetime prevalence, both non-Hispanic Blacks and Hispanics report higher prevalence of anxiety disorders, suggesting greater symptom chronicity after development (Breslau et al.). In addition, one study found that Blacks of Caribbean descent reported more severe anxious symptoms than Blacks of African descent, and Whites reported lower levels of functional impairment than Blacks of either descent (Himle et al.). Regarding specific disorders, Blacks report significantly lower rates of panic disorder, social phobia, and GAD than Whites (Grant et al., 2005, 2006; Kessler et al., 2006; Smith et al., 2006). Both Asian and Hispanic participants reported lower frequencies of panic disorder, specific phobia, social phobia, and GAD than White participants (Grant et al., 2005, 2006; Stinson et al., 2007). Native Americans report panic disorder at higher rates than Whites (Grant et al., 2006). An individual's subculture may influence their risk for the development of anxiety as well. A nationally representative sample of Hispanics in the US revealed that Male Cubans, men that immigrated between the ages of 18–34, and women who have been in the US for less than 5 years were at decreased odds for meeting criteria for an anxiety disorder (Alegria et al., 2007). English proficiency was associated with an increased risk for an anxiety disorder in Hispanic females (Alegria et al.). However, a study comparing rates of OCD in Blacks of African American descent to Blacks of Caribbean descent found similar rates in the groups, with rates similar to previously reported national rates (Himle et al., 2008). Consideration of anxiety prevalence on a larger scale suggests that some disorders may share characteristics globally. A comparison of epidemiological data from six countries, including United States, Puerto Rico, West Germany, Beirut, Korea, and New Zealand revealed no significant differences in rates of panic disorder across countries (Weissman et al., 1995). The rates were consistently higher for women than for men across countries, with the exception of Puerto Rico where the rates were similar across the sexes.

In addition to consideration of variance in prevalence rates of anxiety disorders across cultural groups, clinicians should also be aware of variation in symptom presentation. For example, cultural variance has been found for both the presentation and triggers of panic attacks. Panic attack cues and sensations are believed to be linked to cultural syndromes that generate catastrophic cognitions about bodily sensations (Himle et al., 2009). Physical symptoms that are associated with common medical conditions in the individual's society are likely to be responded to with fear, which can manifest as panic symptoms. Heart attacks are well-known and commonly feared in the United States. Consistently, chest pain is a common symptom of panic attacks in the US. Khmer individuals believe that if there is too much wind in the body, the vessels carrying the wind and blood can become blocked, which could result in permanent limb paralysis or rupturing of the vessels in the neck (Hinton, Nathan, Bird, & Park, 2002). Symptoms associated with wind overload include coldness in the hands and feet, numbness, weakness, muscle ache, dizziness, and pressure in the head. These symptoms, especially dizziness, appear to be linked with panic symptoms in Khmer individuals. Similarly, Vietnamese individuals may believe that cold and wind disrupt the physiology of the body and, therefore, may develop panic symptoms after perceiving a shift in bodily temperature.

A more commonly known, culturally specific disorder that overlaps with panic disorder is *ataque de nervios*. Individuals from some Latin American countries, especially Puerto Rico and the Dominican Republic, describe *ataque de nervios* as a period of intense distress and symptoms of trembling, palpitations, shortness of breath, and aggression. These symptoms are attributed to a potentially dangerous dysregulation of the nerves (Hinton, Chong, Pollack, Barlow, & McNally, 2008). In addition to the specific symptom overlap with panic attacks, a high level of fear of experiencing an *ataque de nervios* may increase the individual's vulnerability to experiencing panic attacks, possibly through increased levels of anxiety sensitivity. Within the United States, research suggests that African-Americans report more intense tingling in the hands and feet, fears of going crazy, and sleep paralysis than Caucasians (Friedman & Paradis, 2002). This difference in symptom presentation could be explained by medical and cultural differences. The higher prevalence of diabetes, hypertension, and feet amputations in African-Americans could increase fear of related physical symptoms in these individuals. Additionally, some African-Americans, particularly those with Caribbean and Southern heritages, may interpret physical sensations as consequences of voodoo or witchcraft, which may lead to increased fears of going crazy or dying. Unfortunately, interpretations of panic symptoms as manifestations of voodoo or witchcraft may lead to misdiagnoses of psychosis in African-Americans. In any assessment, it is important for the clinician to attempt to understand how an individual's presentation compares to what is expected in his or her culture or community. Clinicians should be aware that cultural differences may exist in both presentation and explanations of anxiety symptoms and be prepared to modify diagnoses and treatments as necessary.

7.6.4 Additional Demographic Factors

Additional demographic factors that have been associated with anxiety are SES, employment status, education level, and marital status. Lower income has been associated with increased risk for specific phobia, GAD, and social phobia (Grant et al., 2005; Kessler, Keller, & Wittchen, 2001; Stinson et al., 2007). Lack of traditional employment (e.g., unemployment, social security, or disability) has been linked with higher rates of agoraphobia, adult separation anxiety disorder, and GAD (Kessler et al., 2006; Shear, Jin, Ruscio, Walters, & Kessler, 2006; Wittchen & Hoyer, 2001). Low education has been connected with adult separation anxiety disorder and social phobia (Cairney et al., 2007; Lang & Stein, 2001; Shear et al., 2006). Being previously married has been reported to increase risk for GAD, social phobia, and panic disorder with agoraphobia (Grant et al., 2005, 2006; Kessler et al., 2001Wittchen & Hoyer, 2001). The relationship between many of these demographic factors and anxiety is complicated, and likely bidirectional. As many of these factors are likely to legitimately increase stress for most individuals, clinicians should be careful not to overpathologize normal responses to difficult circumstances. However, stressful life events may activate anxiety symptoms in vulnerable individuals. Alternatively, severe pathology may have a causal role in the development of the individual's difficult life circumstances. While it may be helpful to be aware of increased risk in vulnerable populations, clinicians should always obtain a detailed history and have a strong case conceptualization before making a diagnosis.

7.7 Information Critical to Making a Diagnosis

Figure 7.1 depicts a general overview of many of the key decision points summarized thus far, in terms of differential diagnosis within the anxiety disorders. This "decision tree" is to be used if a patient has reported some of the "pure" fear and anxiety symptoms (e.g., apprehension, tension, edginess, trembling, excessive worry) or physiologic arousal characteristic of anxiety disorders. As highlighted in this figure, key factors to consider include: the presence or absence of pure fear, the presence or absence of a trigger for the fear, the type of trigger for the fear, the foci of anxiety, and the presence or absence of compulsions. The decision tree is not intended as a sole diagnostic measure. In addition to the consideration of specific "dos" and "don'ts" outlined in Table 7.2, the decision tree may be a helpful organizational tool

Table 7.2 Dos and don'ts of diagnostic interviewing for the anxiety disorders

Dos
Do use your theoretical understanding of anxiety and anxiety disorders to guide your questions when conducting a clinical interview
Do use behaviorally specific questions (open and close ended) when interviewing
Do obtain information about the context of the symptom presentation
Do use a standardized assessment in the diagnostic interview for anxiety disorders. Empirical evidence suggests that your assessment will be more reliable and valid if you use these tools
Do use a multimodal assessment. Many assessment modalities are available (e.g., BATs, structured clinical interviews, self-report) and gathering information from a variety of modalities increases the likelihood of making an accurate diagnostic conclusion (Eifert & Wilson, 1991)
Do ensure that the assessor is properly trained. While there are some instruments that may be administered by relatively untrained lay people, even the CIDI requires training to administer (Kessler & Ustun, 2005; World Health Organization, 1990). Other assessments, such as the SCID and the ADIS, require that the interviewer has sufficient training in the given assessment
Do remember that a thorough diagnostic interview does not assume the validity of a phone screener. Even if a patient tells the care provider or clinic staff that he or she has never had a panic attack, you should still administer the panic portion of the assessment
Do recognize the ethical dilemmas in diagnostic assessment and interviewing. APA ethical principals state that, "psychologists use assessment instruments whose validity and reliability have been established for use with members of the population tested" (APA, 2002). If this information is not available, it is *your* responsibility to explain the limitations of the assessment and subsequent diagnosis
Don'ts
Don't dismiss the patient's input. The patient is an incredibly valuable source of information about his or her particular situation. Pay attention!
Don't assume that using standardized assessment procedures means throwing clinical skills and rapport out of the window. It doesn't! The patient still needs to feel comfortable talking to you
Don't rely on unguided, clinical judgment to perform an assessment. Statistical decisions consistently outperform clinical judgment (Brown et al., 2001; Meehl, 1996)
Don't let a lack of resources prevent you from incorporating multimodal and evidence based assessment components. While a multimodal assessment is ideal, many clinicians may not have the resources (e.g., time, tools, etc.) to complete an extensive assessment. Use empirically supported assessment tools in ways that accommodate your particular situation. For example, if lack of time is a problem, self-report measures and self-monitoring forms can be mailed to clients prior to the interview
Don't misdiagnose a phenotypically unusual depression as anxiety. Use good assessment techniques and your knowledge of the shared symptoms of negative affectivity to avoid this problem

to outline some of the key decisions in the assessment of anxiety disorders. As with any assessment, use of this tool should accompany a multimodal assessment that includes consideration and evaluation of comorbid conditions.

7.8 Summary

Anxiety disorders are commonly occurring clinical conditions that can present independently, with other anxiety disorders, or with other nonanxiety psychological disorders. Furthermore, anxiety disorders share symptoms with other psychological and medical disorders. As such, a detailed knowledge of the symptoms for anxiety disorders, commonly co-occurring conditions, and shared symptoms (e.g., negative affect), will aid in the diagnostic process. Specifically, knowing the difference between fear and anxiety (both cognitive and physiologic) will allow clinicians to make more accurate diagnoses. In addition, utilizing a variety of resources (a multimodal assessment) will increase the likelihood of a valid diagnosis. A combination of reliable and valid assessment instruments (e.g., structured clinical interviews, self-report measures, etc.), clinical judgment that is theoretically informed, and the provision of a safe, therapeutic environment will increase one's confidence in diagnostic conclusions.

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Chapter 8
Mood Disorders

Leilani Feliciano and Amber M. Gum

Mood disorders are one of the most commonly seen psychiatric disorders, occurring in about 20.8% of the general population (lifetime prevalence rate) (Kessler, Berglund, Demler, Jin, & Walters, 2005). They are found amongst adult, child, and older adult populations and cut across racial, ethnic, and socioeconomic groups. Mood disorders are costly not only to the individual, in terms of emotional suffering and physical distress, but also to families (e.g., disrupted household routine and economic burden) and to our society. In fact, mood disorders are responsible for significant burden in the United States due to loss of productivity, employee absenteeism/lost wages, and suicide (Greenberg, Stiglin, Finkelstein, & Berndt, 1993). In 2000, costs were identified as reaching estimates of 51.5 billion in productivity losses, and 26.1 billion in treatment costs (Greenberg et al., 2003). Of all mental health disorders, mood disorders are responsible for the highest suicide risk in more developed countries (Nock et al., 2008).

8.1 Description of the Disorders

According to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association, 2000), to be considered a mood disorder the main characteristic observed is a disruption in mood that is substantially different from the person's normal mood state. A *mood episode* is a collection of symptoms that together form a piece of the diagnostic picture. Mood episodes in themselves are not assigned a diagnostic code, but they are necessary elements for a mood disorder to be classified as such, and we discuss them within their respective diagnostic classes.

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The main categories of mood disorders include the unipolar depressive disorders, bipolar disorders, and mood disorders characterized by etiology.

8.1.1 Unipolar Disorders

The unipolar disorders category is composed of three diagnoses (i.e., major depressive disorder, dysthymic disorder, and depressive disorder not otherwise specified). *Major depressive disorder (MDD)* is the most severe of these and thus has been the target of much clinical research. Although depressive feelings are common in response to loss, MDD is diagnosed only in the presence of at least one *major depressive episode,* in which the person reports either lowered mood (sadness/depressed mood) or diminished capacity for enjoyment or interest in usual activities (anhedonia). These symptoms must be present for the majority of the day, nearly every day of the week, and the episode must persist for at least 2 weeks. Additionally, the person must also exhibit a minimum of four additional symptoms during that same time period (see Table 8.1). The observed symptoms must be severe enough to interfere with the person's ability to function in daily life (e.g., social, educational, or occupational arenas) or cause

Table 8.1 DSM-IV-TR symptoms for differential diagnosis of depressive disorders

Major depressive disorder	Dysthymic disorder	Depressive disorder, NOS
Noted by presence of A or B and at least 5 of the numbered symptoms. These must be present for the majority of the day, for approximately every day of the week, for at least *2 weeks*: A. Depressed mood B. Decreased interest or pleasure in all, or almost all, activities 1. Significant weight loss or gain, or an appetite disturbance (i.e., decrease or increase in appetite) 2. Sleep disturbance (i.e., too much or too little) 3. Observable psychomotor agitation or retardation 4. Fatigue or decreased energy 5. Feelings of worthless or excessive or inappropriate guilt 6. Decreased ability to think, concentrate, or to make decisions 7. Recurrent thoughts of death, suicidal ideation, plans, or attempts	Noted by persistent depressed mood (A) occurring for most days of the week, for at least *2 years*, but is not severe enough to warrant a diagnosis of MDD. PLUS at least 2/6 of the numbered symptoms: A. Depressed mood 1. Appetite disturbance (i.e., poor appetite or overeating) 2. Sleep disturbance (i.e., insomnia or hypersomnia) 3. Low energy or fatigue 4. Low self-esteem 5. Poor concentration or decision making 6. Feelings of hopelessness	Noted by presence of depressive symptoms which do not meet criteria for diagnosis of other mood disorders A. *Minor depressive disorder*; at least 2 weeks of depressive symptoms but only 3–4 of the symptoms required for MDD B. *Recurrent brief depressive disorder*; from 2 days to 2 weeks of depressive symptoms, occurring at least once a month for 12 months (not linked to menstrual cycle in females) C. *Clinician identified depressive disorder*; depressive disorder is present but it is unclear whether it is primary or secondary

Note: Adapted from the DSM-IV-TR (APA, 2000) significant distress to the person. To qualify for a diagnosis of MDD, the person must not have ever met criteria for a manic episode, hypomanic episode, or cyclothymic disorder (discussed in bipolar disorders section).

Depending on the severity of the symptoms, MDD is qualified as mild, moderate, or severe. Severity is typically established depending on the number of symptoms and the level of disability present in the affected individual. In *mild MDD,* the person who typically displays only enough symptoms to merit diagnosis, is distressed by the symptoms, is able to continue in social, educational, or occupational endeavors, but finds it difficult and effortful. With *moderate MDD*, the person typically has more symptoms than those in the mild category, but not enough to warrant a descriptor of severe. The person typically has substantial difficulty in continuing with social, education, or occupational activities. In *severe MDD*, the person displays multiple symptoms in addition to what is required for diagnosis, and symptoms clearly and significantly interfere with social, educational, and occupational functioning.

Additionally, some persons with severe MDD may present with *psychosis* – delusions and or hallucinations experienced during the depressive episode. The person may experience *catatonia*, such that the person may present as immobile, mute, or with bizarre posturing. A person will be given a diagnosis of MDD, *recurrent type* if he or she has experienced more than one episode of MDD. If the major depressive episode has persisted for 2 years or more, a specifier of *chronic MDD* should be added. Because at least 50% of the individuals who have experienced an episode of MDD go on to experience another episode, rather than removing the diagnosis, a person who is no longer experiencing any depressive symptoms is considered to have MDD *in remission* (APA, 2000).

In epidemiological studies, the prevalence of MDD varies depending on the population studied. In general community samples, the lifetime prevalence of MDD has been reported to be between 5.8 and 16.6% (Kessler et al., 2005; Regier et al., 1988). Although there does not appear to be a significantly greater risk by race or ethnicity (although there is certainly variability between the different ethnic groups), women tend to be at higher risk for MDD than men, and medical, inpatient, and nursing home settings all have higher rates than that of the general population. For a more extensive summary of prevalence rates in special populations, see Feliciano and Areán (2008).

Dysthymic disorder (DYS). Dysthymic disorder (also called dysthymia) is described as a chronic depression of mood, but it is not sufficiently severe to be classified as a major depression. The estimated lifetime prevalence of dysthymic disorder is between 2.5% (Kessler et al., 2005) as reported in a large population-based study using DSM-IV criteria (US National Comorbidity Survey Replication) to 3.1% (Weissman, Leaf, Bruce, & Florio, 1988). Rates are reported to be higher in primary care settings (8.3%) (Burnam, Wells, Leake, & Landsverk, 1988). DYS appears to be equally represented in both boys and girls in childhood, but this changes in adulthood, with women being diagnosed almost twice as often as men (Kessler et al., 1994; Weissman et al.).

To be classified as DYS, symptoms must last a minimum of 2 years, without more than a 2-month period in which the person is without symptoms (see Table 8.1). An additional requirement for diagnosis is that symptoms should not be secondary to other medical (including direct effects of substance or medication side effects) or mental health conditions (including mania, hypomania, or cyclothymia), and there should be no major depressive episode present during the first 2 years of DYS. If one or more major depressive episodes occur after the 2-year period, then MDD is also diagnosed, often referred to as "*double depression.*" Additional qualifiers for DYS are related to the age of onset of symptoms. If symptoms occur prior to age 21, then a specifier of *early onset* is noted, and onset at age 21 or later is referred to as *late onset*.

Depressive disorder not otherwise specified (Depressive disorder NOS). This category contains a number of additional disorders that do not meet criteria for MDD or DYS, and yet are clinically significant. These disorders have not been researched well enough to merit their own diagnostic classification and thus are subsumed under the unipolar depressive disorders category; these disorders include minor depressive disorder, recurrent brief depressive disorder, clinician identified depressive disorder, postpsychotic depressive disorder of schizophrenia, a major depressive episode superimposed on psychotic or delusional disorders, and premenstrual dysphoric disorder.

Minor depressive disorder refers to a subclinical depression (depressive episode lasting 2 weeks or more but with only 3–4 of the required symptoms for diagnosis of MDD). *Recurrent brief depressive disorder* refers to subclinical depression that reoccurs, but lasts less than the 2 weeks required for MDD. *Clinician identified depressive disorder* is a subjective category that allows for depression that is clinical, but is unable to be determined whether the depression is primary or secondary (e.g., due to a general medical condition). *Depression due to a general medical condition* refers to a disruption in mood that is described as having either "depressed mood; markedly diminished interest or pleasure; or elevated, expansive or irritable mood…is the direct physiological consequence of a general medical condition… and is not better accounted for by another mental disorder" (APA, 2000, p. 401). The associated medical condition should be listed in the diagnosis (e.g., Mood disorder due to Parkinson's disease). If the depressed mood appears to be due to the direct effect of substance use, abuse, or withdrawal, then a diagnosis of *substance-induced mood disorder* would be given instead. *Postpsychotic depressive disorder of schizophrenia* refers to a depression that occurs only following an active phase of psychosis (i.e., residual phase). A *major depressive episode superimposed on psychotic or delusional disorders* refers to depression that is comorbid with the active phase of a psychotic disorder, and *premenstrual dysphoric disorder* refers to a depression that occurs in relation to the female menstrual cycle and typically remits a few days prior to, or 1-week, post menses.

8.1.2 Bipolar Disorders

The bipolar disorders include four diagnoses: bipolar I disorder, bipolar II disorder, cyclothymic disorder, and bipolar disorder NOS. To be given a diagnosis of *bipolar I*, a person has to exhibit at least one *manic episode.* A manic episode is one in which the person experiences an elevated, expansive, or irritable mood that is different from normal mood states for that person and which persists for a period of at least 1 week. In addition, the person must experience at least 3–4 additional symptoms depending on whether the person has an elevated or expansive mood or an irritable mood only (see Table 8.2). The symptoms should not be better accounted for by other mental health or medical diagnoses. Frequently, persons with bipolar I have also experienced at least one major depressive episode as well. However, a major depressive episode is *not required* for diagnosis. If criteria for both types of episodes are met at the same time, this is referred to as a *mixed episode* (APA, 2000). In their review of bipolar and unipolar depression, Cuellar and colleagues report that 25–33% of persons with bipolar I report the absence of having any major depressive episode (2004). The lifetime prevalence rate of bipolar I is between 0.4% and 1.6% in community settings (APA).

Bipolar II requires only a *hypomanic episode*, which has the same characteristics as a manic episode, but is less severe, in that it is required to last only at least 4 days, does not include psychotic features, and does not markedly impair functioning

Table 8.2 *DSM-IV-TR* symptoms for differential diagnosis of bipolar disorders

Bipolar I	Bipolar II
Noted by presence of an irritable, expansive or elevated mood (A), and result in significant impairment in function (B). Plus a minimum of 3/7 of the numbered symptoms must be present, unless the mood is only irritable in which case 4/7 is required. These must be present for at least *1 week*:	Noted by presence of an irritable, expansive or elevated mood (A) and results in some impairment in function (B). Plus a minimum of 3/7 of the numbered symptoms must be present, unless the mood is only irritable in which case 4/7 is required. These must be present for at least *4 days*:
A. Discrete period of irritable, expansive, or elevated mood	A. Discrete period of irritable, expansive, or elevated mood without psychotic features
B. Symptoms result in *substantial* impairment in social, educational, or occupational arenas – may require hospitalization	B. Symptoms result in *some* change in social, educational, or occupational arenas that is observable to others, but does not require hospitalization
1. Inflated sense of self-esteem or grandiose thoughts	1. Inflated sense of self-esteem or grandiose thoughts
2. Sleep disturbance (i.e., decreased need for sleep)	2. Sleep disturbance (i.e., decreased need for sleep)
3. Hyperverbal or pressured speech	3. Hyperverbal or pressured speech
4. Reports of "racing thoughts"	4. Reports of "racing thoughts"
5. Easily distractible by nonsignificant details/stimuli	5. Easily distractible by nonsignificant details/stimuli
6. Psychomotor agitation or an increase in purposeful activities	6. Psychomotor agitation or an increase in purposeful activities
7. Excessive involvement in high risk activities	7. Excessive involvement in high risk activities

Note: Adapted from the DSM-IV-TR (APA, 2000) or cause hospitalization. Similar to MDD, the bipolar disorders are further classified regarding severity and initial or recurrent episode. If recurrent, the episode should be categorized by the description of the most recent episode (e.g., bipolar I disorder, most recent episode manic). Additionally, specifiers are added as to whether catatonic features are present, onset following pregnancy (i.e., postpartum onset), and presence of observable patterns in the course of the disorder (i.e., seasonal pattern, rapid cycling). The lifetime prevalence rate of bipolar II is 0.5% in community settings.

Although it is currently in debate whether bipolar I and bipolar II represent two discrete categories of disorders or whether they are the same disorder but fall along a continuum, current research notes that there are some differences in the clinical course of the disorder. For example, individuals with bipolar II are five times more likely to have a higher number of episodes and exhibit rapid cycling than those with bipolar I (Baldessarini, Tondo, Floris, & Hennen, 2000).

According to the results from several large epidemiological studies, bipolar I appears to be equally common in both men and women, but bipolar II tends to be diagnosed more frequently in women (APA, 2000; Kessler et al., 2005; Schneck et al., 2004). The average age of onset of bipolar disorder has been reported to be between ages 20 and 25 (APA; Kessler et al.). Earlier age of onset is associated with rapid cycling and with a poorer prognosis (Schneck et al.). Onset of an initial manic episode that occurs after the age of 40 is likely to be secondary to a general medical condition or substance use (APA).

A recent meta-analysis on bipolar disorders revealed that 25–50% of individuals with bipolar disorder attempt suicide (lifetime prevalence) and another 1% of these individuals die from their efforts (Fountoulakis, Gonda, Siamouli, & Rihmer, 2009). These staggering numbers highlight the importance of routinely assessing suicide risk in this population.

Cyclothymic disorder (CD). Cyclothymic disorder (also called cyclothymia) refers to a variant of bipolar disorder that is characterized by mood periods that alternate between hypomanic and depressive symptoms. These symptoms are not severe enough to meet criteria for a full manic or major depressive episode. CD has a chronic course (2 years or greater) without more than a 2-month period free of any symptoms. Similar to DYS, an additional requirement for diagnosis is that symptoms should not be secondary to other medical (including direct effects of substance or medication side effects) or mental health conditions (including any psychotic disorder), and there should be no major depressive episode present during the first 2 years of the diagnosis. After those first 2 years, if a major depressive episode occurs, the person would receive diagnoses of both CD and bipolar II. Likewise, during the first 2 years, there should be no manic or mixed episode present, as well. If a manic or mixed episode occurs after those initial 2 years, the person would receive diagnoses of both CD and bipolar I.

Bipolar disorder not otherwise specified (Bipolar disorder NOS). The last category of bipolar disorders includes mood impairments that have bipolar features but do not meet the threshold for diagnosis of any of the bipolar disorders. Examples of disorders that would fit this category include: *very rapid alternations* that occur over several days but do not last long enough to meet the requirements for criteria of manic, hypomanic, or major depressive episodes; *recurrent hypomanic episodes without intercurrent depressive symptoms; a manic or mixed episode superimposed on a psychotic disorder* refers to hypomania that is comorbid with the active phase of a psychotic disorder*; hypomanic episodes with chronic depressive symptoms* but those symptoms are not frequent enough to meet diagnosis for CD; and *clinician identified bipolar disorder* is a subjective category that allows for a bipolar disorder that is clinically significant, but unable to be determined if the bipolar disorder is primary or secondary (e.g., due to a general medical condition).

8.1.3 Mood Disorder Characterized by Etiology

This last category of mood disorders includes *mood disorders due to a general medical condition* and *substance-induced mood disorder*. The key feature for both these disorders is that the mood impairment is deemed by the clinician to be secondary to either the medical condition or the effects of a substance. Thus, there must be evidence that the mood disruption is a direct consequence of the medical condition. Evidence can be from historical information or from a physical exam (includes laboratory test results). The disruption in mood can be either depressive in nature or can be elevated, expansive, or irritable. The mood disorder should not be better accounted for by another mental disorder, or occur only during the course of a delirium. Lastly, as with all mood disorders, the disruption in mood must cause significant distress or impairment in social, educational, or occupational areas.

8.2 Procedures for Gathering Information

There are a number of different ways in which clinicians and researchers alike can begin the process of gathering information for assessment. These strategies include both informal and formal assessment methods. Despite the presence of some very good structured and semistructured clinical interviews, *informal assessment* remains the most commonly practiced strategy for information gathering. Typically, the clinician or mental health practitioner will meet with the client in a face-to-face interview and ask a number of questions regarding his or her current mood, the length of time that the person has felt this way, and specific symptoms. An assessment of family history, medical history, and previous psychiatric history are usually also undertaken. The flow of questions in such an interview is typically unstructured, open-ended, and depends on the person's response to the questions. Unfortunately, relying solely on this strategy may be less reliable and lead to the possibility of misdiagnosis or failing to recognize comorbid conditions that present with similar symptomatology. For this reason, many managed health care organizations and mental health organizations prefer to use a mix of formal and informal methods of gathering data to serve as a guideline to ensure that all pertinent questions are asked.

To approach assessment from an evidence-based perspective, the purpose of assessment should determine the type of assessment strategies utilized. The purpose of assessment typically includes screening for risk, diagnosis, and treatment planning; thus, the type of assessment chosen should reflect these needs. For diagnostic purposes, semistructured and structured interviews are excellent tools to assist in confirming the presence of a disorder. These interviews are reliable and valid tools that assist in conducting a more thorough evaluation and diagnosis of disorders compared to unstructured interviews. With semistructured interviews, the interviewer has a list of specific questions to be covered and flexibility to ask follow-up questions to seek clarification and details necessary for diagnosis.

Structured interviews contain a set number of questions to be asked in a set order. Because of their format, these types of interview tools provide a standardized process for gathering information, which can improve consistency in service delivery, reliability in diagnosis, and provide a means for tracking clinical outcomes/change indicators (Sheehan et al., 1998). In addition, structured and semistructured interviews decrease the need for extensive training of interviewers. However, some of these interviews are time consuming and while they can be used for tracking change, they are not practical for this purpose. Once a diagnosis is confirmed, a clinician-administered measure such as the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967) may be more useful for tracking outcomes (Joiner, Walker, Petitt, Perez, & Cukrowicz, 2005). The other disadvantage to structured interviews is that there is no flexibility in questioning. If a question is not fully answered or explicated well, the interviewer is not allowed to deviate from the prescribed set of questions. To deviate from the standardized process would lead to a decrease in reliability and validity of the norms. The most commonly used structured and semistructured interviews will be discussed in further detail in later sections.

Standardized screening measures are excellent choices, if the goal of assessment is to identify those who may be at risk of developing a mood disorder. These measures can help identify those people who may need further assessment with a structured or semistructured diagnostic interview. The primary benefits of using a screening measure include the brief amount of time required to administer them and a decreased need for extensive training in their usage, making them ideal for use in primary care and other general health and social service settings. The most common screening measures are self-report measures. Typically, the person is asked to indicate the severity of a specific symptom that he or she may be experiencing over an identified time period (e.g., over the last 2 weeks). The inventory is then scored by the clinician. The person's score on the instrument reflects the severity of the disorder. Commonly used self-report measures of depressive symptoms include the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996), the Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977), the Zung Depression Scale (ZDS; Zung, 1972), the Montgomery Asberg Depression Rating Scale-Short form (MADRS-S; Montgomery & Asberg, 1979) and the Profile of

Mood States (POMS; Plutchik, Platman, & Fieve, 1968). Of all the self-report inventories available, the *BDI-II* is the most popular instrument used. The BDI-II is a 21-item self-report inventory that addresses depressive symptoms, and has been validated for use with community dwelling adults, older adults, and inpatient samples. The BDI-II takes approximately 20 min to administer and has good internal consistency and concurrent validity (Segal, Coolidge, Cahill, & O'Riley, 2008; Steer, Rissmiller, & Beck, 2000).

Other self-report measures have been designed for use with specific populations, such as the Geriatric Depression Scale (GDS; Yesavage et al., 1982) and the Nine-Item Patient Health Questionnaire (PHQ-9; Spitzer, Williams, Kroenke, Hornyak, & McMurray, 2000). These inventories are thought to be more valid for use with older adults and medical patients, respectively due to a decreased emphasis on items related to somatic symptoms.

Other screening measures are administered by the clinician. These instruments include the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967), the Montgomery Asberg Depression Rating Scale (MADRS; Montgomery & Asberg, 1979), and the Inventory of Depressive Symptomatology – Clinician-rated. The *HRSD* is a commonly used clinician-rated measure of depression severity and has been considered by many to be the "gold standard." Although there are several versions of the HRSD available, the 21-item inventory is the most commonly used. This inventory typically takes approximately 20–30 min to administer. The HRSD has been well validated and has good internal consistency (Cronbach's alpha = 0.81 and 0.88) (Carmody et al., 2006). The *MADRS* is a 10-item rating scale for depression that takes approximately 20 min to administer. The MADRS is an excellent alternative to the HRSD as it is reported to be more sensitive to tracking clinical change in symptoms, is unifactorial, has higher internal consistency ratings, and inter-rater reliability (>0.90). For a complete review of these measures see Rogers (2001).

There are also screening measures that are designed for use with special populations such as individuals with cognitive impairment and bipolar disorders. For example, the *Cornell Scale for Depression in Dementia* (CSDD; Alexopoulos, Abrams, Young, & Shamolan, 1988) is completed by the clinician in conjunction with another person with sufficient knowledge of the identified patient (e.g., administered directly to a caregiver, or significant other). Depressive symptoms are evaluated on a 3-point rating scale (0 = "absent", 1 = "mild or intermittent", and 2 = "severe"), with higher scores being indicative of higher severity of depression. The CSDD has adequate inter-rater reliability (kappa = 0.67), good internal consistency (0.84), and concurrent validity with the HRSD.

Picardi (2008) in her review of rating scales in bipolar disorder, states that because the clinical features of bipolar disorder are different than in unipolar disorders (e.g., motoric retardation, elevated or expansive mood), the typical depressive symptom self-report scales may not be as useful for identification of bipolar symptoms. Self-rating measures recently developed, that are specific to bipolar disorders, include the Bipolar Depression Rating Scale (BDRS; Berk et al., 2007) and the Bipolar Inventory of Symptoms Scale (Bowden et al., 2007). The Inventory of Depressive Symptomatology has also been used in research to screen for bipolar disorder. Similar to other self-report measures of depressive symptomology, these measures are brief and allow for frequent administration, which can be effective in tracking rapid cycling (Picardi, 2008). The reader is referred to Picardi (2008) and Allen and Smith (2008) for a more comprehensive review of screening measures for bipolar disorders.

Self-report screening measures tend to differ on how frequently the measure should be administered (e.g., the BDI-II can be given every 2 weeks, whereas the CES-D and ZDS can be given weekly and the BDRS is given every 2 days), the symptoms covered (e.g., the PHQ-9 directly maps onto the major criteria of the *DSM-IV* MDD diagnostic criteria whereas the BDI-II covers less core depressive symptoms), the format of the questions (e.g., the BDI-II has scaled questions with a "0" indicating absence of the symptom and a "3" indicating the most severe expression of that symptom, whereas the GDS has items that are presented in a "yes/no" format), and the amount of time necessary to administer. The main drawback to the use of screening measures lies within their inability to fully assess the degree of impairment and nuances of the depressive symptoms. Screening measures tend to be more inclusive (i.e., more sensitive than specific) in order to capture as many possible persons at risk and, therefore, tend to result in more false positives. For these reasons, screening measures should never be used in place of a thorough diagnostic workup in making a definitive diagnosis.

Finally, if the goal of assessment is tracking outcomes or clinical change over time, clinicians can use a severity measure or have the client use a data sheet to *self-monitor* depressive symptoms (e.g., daily mood log) or engagement in pleasurable events (e.g., weekly activity log). Because self-report is subjective, can be biased, or otherwise inaccurate (relies on memory and adequate perceptions of events) *direct observation* of the client may also be useful in tracking outcomes. These observations can occur within session by the clinician (e.g., observation of person's grooming, hygiene, psychomotor agitation or slowing), or out of session, by a significant others (e.g., collateral data). Regardless of the method chosen, tracking outcomes can provide evidence as to whether or not the clinician accurately diagnosed the condition, provide information for treatment planning, and allow for evaluation of treatment effectiveness.

8.3 Case Illustrations

8.3.1 Older Adult with Longstanding Bipolar Disorder

The client was a 67-year old, Caucasian man who was voluntarily admitted to a psychiatric inpatient facility with severe depressive symptoms and suicidal ideation. His medical records indicated a longstanding history of bipolar disorder, with a current, severe, depressive episode that had been resistant to outpatient treatment.

The intake assessment included a thorough assessment of his current psychiatric symptoms using a semistructured interview format, with particular emphasis on assessment of *DSM-IV* criteria for manic and depressive episodes. The intake assessment also included a comprehensive review of his psychiatric history, including past manic and depressive episodes, alcohol and substance use, suicidality, and treatment history. He reported one suicide attempt approximately 20 years prior.

The intake assessment revealed that the client was experiencing a severe major depressive episode with frequent thoughts of suicide, but no current suicidal intention or plan and no current manic symptoms. He complained of cognitive deficits, and his medical history included diagnoses of hypertension, hypercholesteremia, and Type II diabetes, all risk factors for dementia. CT scans revealed no lesions suspected to affect cognitive functioning. Thus, a neuropsychological evaluation was performed next to determine the presence of dementia and/or the potential effects of the client's depressive episode on his cognition. A standard neuropsychological battery was administered that assessed multiple domains of cognition: intelligence, visuospatial ability, language, memory, and executive functioning. An important part of the assessment was careful observation of the client's behavior, such as level of effort, signs of fatigue, self-criticism, and response to encouragement.

Overall, the client's performance was indicative of a depressive pattern of cognitive functioning without signs of dementia. Compared to age and education-adjusted norms, his performance indicated average intelligence, language, and verbal memory. His performance was low-average for visuospatial ability and nonverbal memory. Tests of executive functioning were average overall but varied, with low-average performance on abstract reasoning and cognitive flexibility. His behavior also indicated interference from depressive symptoms, such as his variable effort (usually better at the beginning of tasks, suggesting fatigue), criticizing his performance, working slowly on timed tasks, and responding positively to encouragement.

Ultimately, this client was diagnosed with bipolar disorder, current episode depressed, with no diagnosis of dementia. The treatment plan focused on management of depressive symptoms, as well as structuring and encouragement to facilitate his engagement in tasks and pleasant activities that would be cognitively stimulating but not taxing. This case is illustrative of many of the issues in diagnostic interviewing with older adults. Most older adults have onset of their psychiatric disturbance prior to entering late life (Kessler et al., 2005) and thus, may have a long, complex diagnostic and treatment history requiring thorough evaluation. Older adults also frequently have medical comorbidities and cognitive deficits that complicate the diagnostic picture, so the ideal assessment process involves an interdisciplinary team including experts in psychiatry, geriatric medicine, and neuropsychology, among others.

8.3.2 Minority Older Adult with Major Depressive Disorder

The client was a 71-year old, divorced, Hispanic-American woman who presented with complaints of lifetime depression. The intake assessment included a thorough assessment of her current and past history of psychiatric symptoms, alcohol and substance use, suicidality, medical and treatment history using the SCID. The SCID was supplemented with a depression severity measure (HRSD) and a mental status exam. Because the client also endorsed some memory complaints, the intake assessment also included a brief neuropsychological battery.

At intake, careful attention was given to developing rapport, and explaining the reason for assessment and for questions that were asked about her psychiatric and family history. The client reported symptoms consistent with a diagnosis of major depressive disorder, including depressed mood all day nearly every day, fatigue, and disrupted and restless sleep (occasional difficulties falling asleep but wakes frequently and sometimes takes 1–3 h to fall back to sleep). She stated that she cried frequently, was lonely, and had few social supports. She reported being self-critical (about her weight and cleanliness/clutter of her home), feeling worthless and guilty over things that she has done or not done. She believed that she has brought the depression on herself and wondered why she didn't take better care of herself. She also reported a loss of interest and pleasure in things that she used to enjoy and felt that she had to push herself to do anything, and reported "having nothing to look forward to." She also reported feeling discouraged and pessimistic about the future (e.g., saw her future as "bleak"). When asked how she thinks things will work out, she stated that she will "probably be alone the rest of my life," A review of her psychiatric history revealed that she had struggled with depression on and off for most of her life. Her medical history was notable only for a total hip replacement several years prior and her family history was unremarkable for psychiatric disorders.

In addition to depressive symptoms, the client reports several psychosocial stressors including worry about finances, problems at work (conflict with supervisor), and worry about physical health. However, these did not appear to be excessive given her current financial situation (e.g., low-income) and history of medical problems. In addition, these symptoms did not, by the client's report, cause clinically significant distress or significant impairment in occupational or social functioning. She denied current suicidal ideation, hallucinations and delusions.

Her mental status exam was notable for psychomotor retardation, somewhat blunted affect, and negative thought content (e.g., depressotypic thoughts, worry about health and financial difficulties). She described her mood as "sad" and was preoccupied with worry over cognitive complaints including difficulties with concentrating at work, making decisions, and mild memory difficulties including difficulty remembering medications and dates. On exam, she also met criteria for mild cognitive impairment.

At the conclusion of the assessment, this client was diagnosed with major depressive disorder, recurrent, moderate. In addition to depressive symptoms, she reported psychosocial stressors including worry about finances, problems at work (conflict with supervisor), and worry about physical health. Despite this report, she did not meet criteria for a diagnosis of a comorbid anxiety disorder, as the anxiety did not cause clinically significant distress or significant impairment in social or occupational functioning. Given her test results, the client also received a diagnosis of mild cognitive impairment. The treatment plan focused on depressive symptoms and utilized Problem Solving Therapy techniques. The case is illustrative of some of the issues related to working with a minority elder. For example, careful attention was given to the development of rapport and reducing stigma associated with reporting mental health symptoms. The interviewer was attentive to the client's biopsychosocial concerns and took care to use the client's preferred language for discussing depressive symptoms resulting in an increased atmosphere of caring and comfort to assist the client with the assessment process.

8.4 Recommendations for Formal Assessment

In their evidence-based review of depression and its assessment, Joiner, Walker, Pettit, Perez, and Cukrowicz (2005) recommended that a structured clinical interview is the best start for assessing depression. In addition, these researchers recommended that the interview should be supported with well-validated and reliable self-report instruments to provide a measure of symptom severity. In this manner, both clinician-ratings and client report are adequately taken into account. We heartily agree with these recommendations. However, in certain settings in which a full clinical interview is not possible (e.g., primary care), we add that it is often more expedient to use a valid and sensitive screening measure first, followed by a more thorough assessment for those individuals who screen positive.

8.5 Standardized Interview Formats

There are many standardized interviews that are designed to aid the clinician in diagnosis of mental health conditions. Each interview contains sections geared towards identification of mood disorders within the larger context of other psychiatric disorders. The following section will review some of the more commonly used reliable and valid instruments.

The *Structured Clinical Interview for DSM-IV-TR Axis I Disorders* (SCID; First, Spitzer, Gibbon, & Williams, 2002) is considered the state-of-the-art semistructured clinical interview based on the *DSM-IV* and has been used in many studies worldwide. The SCID fully assesses the criteria for mood disorders and can take from 1 to 3 h to fully administer. It contains sections designed to differentiate depressive and bipolar episodes and to differentiate mood symptoms induced by substances or medical illness. The format of items includes standard questions, qualifying questions, and optional probe questions to clarify diagnostic criteria. The SCID is available in two formats: The Clinician Version (SCID-CV) and the Research Version (SCID-RV). The SCID-RV may be used with the SCID-CV and supplements the interview with focus given to additional diagnoses and specifiers. Reliability studies, overall, indicate good to excellent reliability for current diagnoses, moderate test–retest reliability, moderate concurrent validity, and moderate convergent validity (Rogers, 2001).

An alternative is the *Composite International Diagnostic Interview Version 2.0* (CIDI; WHO, 1997), which is a fully-structured clinical interview that is briefer than the SCID. The CIDI was developed for the World Health Organization to allow for a comparison of psychopathology from an ICD framework to one that is compatible with definitions from the *DSM-IV*. This structured clinical interview is also available in a computerized format that is programmed to allow for probe questions, skip patterns, and flow charts that enable full diagnostic potential. Because the program provides the diagnosis, the examiner does not need to make any clinical judgments and thus, the CIDI can be administered by anyone with minimal training (Cooper, Peters, & Andrews, 1998). However, the drawback to computer administration lies in its reliance on self-report. Therefore, individuals who have poor insight or who may deny the presence of mental disorders may make it difficult to accurately diagnose certain disorders (Thornton, Russell, & Hudson, 1998). For these reasons, the CIDI is best used in conjunction with an interview with a clinician. Reliability and validity measures of the CIDI are complex and depend on the version used, translation, and administration format. The reader is referred to Rogers, 2001, for a thorough discussion and summary of CIDI validation studies.

The *Schedule for Affective Disorders and Schizophrenia* (SADS; Endicott & Spitzer, 1978) is a semistructured clinical interview designed to assist in differentiating between affective, psychotic, and substance use disorders using the Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1978). The SADS is divided into two parts. Part I addresses current mental health disorders and impairment, and Part II address the past history of psychiatric disorders and previous treatment received (Segal, 1997). Items are arranged around specific diagnoses, allowing for both standard and additional probe questions and skip outs to decrease administration time where possible. Typical administration time is 1–2.5 h depending on the current symptoms and extensiveness of the client's history (Segal). The SADS has demonstrated excellent inter-rater reliability for Part I and high internal consistency (kappa > 0.79) for all summary scales (exception of formal thought disorder and anxiety). This inventory has been reported to be the best choice for use with mood and psychotic disorders (Rogers, 2001). However, because the SADS was not developed on a DSM system, it is suggested that interviewers use supplemental questions to assist with making diagnoses with the DSM-IV (Rogers).

The *Mini-International Neuropsychiatric Interview* (MINI) is a semi-structured interview developed by Sheehan et al. (1998) for the purpose of assessing 17 of the most commonly occurring *DSM-IV* and ICD-10 psychiatric disorders. The MINI is a brief instrument, with an administration time of about 15 min. Unlike the SCID and SADS, the focus of this interview is on current symptoms rather than on past history of symptoms (the exception is for bipolar disorder), which reduces the administration time. The psychometric properties of the MINI are quite good with excellent inter-rater reliability (median kappa = 0.92) and good test–retest reliability (median kappa = 0.78) for all diagnostic categories (Sheehan et al.). The MINI has very good specificity (>0.86 with SCID; >0.72 with CIDI) and positive predictive values for most diagnostic categories. The MINI also has good concurrent validity (median kappa = 0.67 with the SCID, and 0.63 with the CIDI) (Sheehan et al.). It is available in a patient rated assessment format for use in outpatient settings (the MINI-PR) and a shorter screening tool, the MINI-Screen, for primary care. There is also a computerized version now available. The psychometric properties of this version are currently under investigation.

For a more complete review of standardized interviews, the interested reader is referred to Rogers' (2001) *Handbook of diagnostic and structured interviewing*.

8.6 Impact of Race, Culture, Diversity, and Age

Multiple dimensions of diversity can impact the assessment of mood disorders, including race and ethnicity, socioeconomic status, and age, to name a few. Thorough review of diagnostic considerations for each diverse group is beyond the scope of this chapter; rather, the focus is on general considerations and strategies. Moreover, there are significant individual differences within groups that require a flexible, individualized approach to diagnostic interviewing. The individual's background likely impacts the assessment process from the first encounter, as the clinician strives to build trust, rapport, and socialize the individual to the assessment process. As the assessment progresses, the client's background may influence how symptoms are presented and conceptualized, for which the clinician needs to consider the validity of standardized assessment tools being used and additional cultural factors to assess. Finally, individuals do not experience mood symptoms in a vacuum; rather these symptoms occur in the context of other biopsychosocial considerations, which inform the clinician's case conceptualization and treatment planning.

8.6.1 Rapport Building and Education about the Assessment Process

Research indicates that some individuals from minority racial and ethnic backgrounds, as well as older adults, have limited "mental health literacy" (i.e., understanding of mental health symptoms and treatments according to current psychiatric conceptualizations) (Jorm, Christensen, & Griffiths, 2006; Lewis-Fernandez, Das, Alfonso, Weissman, & Olfson, 2005). Relatedly, there may be stigma concerns, such as older adults' fears of institutionalization (based on the historical context of mental health services being primarily for those with very severe mental illness) (Knight, 2004) or African-Americans' concerns about being labeled "crazy" (based on stigma concerns, as well as the pattern that African-Americans with mood disorders are disproportionately misdiagnosed with psychotic disorders) (Strakowski et al., 1996, 1997). This poor mental health literacy and stigma may impact rapport building as well as symptom reporting (i.e., whether symptoms are reported and how they are described).

Two strategies during the initial rapport-building phase may mitigate these concerns and maximize information gathering (a) carefully informing the client of the purpose of the assessment and what to expect during the assessment process, and (b) reducing stigma through normalizing or empathetic responses. First, it is important to ascertain the client's understanding of why she is seeing you, and to provide her with all relevant information about the purpose of the assessment. Similarly, the interviewer should inform the client about what to expect, such as length of the assessment, types of information that will be sought, rationale for the information being asked of the client, from whom information will be sought, (including gathering appropriate permissions), and how the assessment results will be used and reported back to the client. Some clients may be concerned about the outcomes of assessment (e.g., hospitalization, competency or legal issues) or concerned about protection of their confidentiality, so the clinician needs to carefully discuss the potential outcomes of the assessment and what information will be shared with whom. Stigma concerns may be reduced by normalizing or empathizing with the client's symptoms or situation, even expecting symptoms as typical. For example, in conducting an assessment of mood symptoms with an older caregiver who had recently placed her partner in a long-term care facility, the clinician noted that caregivers often feel guilty, worrying that they "didn't do enough," and then asked if the client was experiencing any feelings of guilt. At this point, she began to open up more about her guilt as well as other depressive symptoms.

8.6.2 Use of Standardized Diagnostic Tools

Standardized diagnostic tools that have been validated for diverse populations are a critical component of diagnostic interviewing. Although it is beyond the scope of this chapter to provide a comprehensive review of all potential measures, it is critical to examine the evidence of validity with diverse populations prior to selecting measures. Some tools have become well-established with diverse populations, however. For example, the *Patient Health Questionnaire-9* (PHQ-9; Kroenke, Spitzer, & Williams, 2001) is a brief, nine-item screening tool for depression that is based on the *DSM-IV* (APA, 1994). It has shown very good validity in relation to expert clinician interview, with 88% sensitivity and 88% specificity for diagnosis of major depressive disorder at scores of 10 or higher. It can also be used to assess severity of depressive symptoms. This scale has been used with a wide range of samples, including primary care and other medical patients, individuals from various cultural backgrounds (e.g., diverse populations within the United States, including Latino and African-American; Nigerian; Thai; Korean), and older adults (Adewuya et al., 2006; Diez-Quevedo, Rangil, Sanchez-Planell, Kroenke, & Spitzer, 2001; Han et al., 2008; Huang et al., 2006; Lotrakul et al., 2008; Omoro et al., 2006; Yeung et al., 2008). The SADS and MINI also have been translated into several different languages.

The SCID, as mentioned previously, has been used with diverse samples. In addition, the CIDI has been translated widely and used worldwide in the WHO's World Mental Health (WMH) Survey Initiative (Kessler et al., 2004). In a study across four countries (France, Italy, Spain, U.S.), the WMH-CIDI showed fairly good agreement with the SCID for 12-month diagnoses (Haro et al., 2006).

8.6.3 Supplementing Standardized Assessment with a Cultural Formulation

Despite the value of standardized tools, the individual's cultural context must be considered in formulating a diagnosis and treatment plan. A *DSM-IV* workgroup developed a cultural formulation, which has since been further refined and expanded, with available case examples (for review, see Lewis-Fernandez & Diaz, 2002). The cultural formulation assessment method developed by this workgroup to assess five domains (a) cultural identity of the individual (e.g., reference group, acculturation across host and origin cultures, language); (b) cultural explanations of illness (e.g., idioms and symptom presentation, meaning of illness in relation to cultural norms, perceived explanatory models); (c) cultural factors related to psychosocial environment and levels of functioning (e.g., interpretations of stressors, social networks); (d) cultural elements of client–clinician relationship; and (e) overall cultural assessment for diagnosis and care.

In the cultural formulation, each domain is assessed through a narrative format, whereby the clinician inquires about the client's family and cultural background, acculturation, perceptions of the symptoms, causes, and solutions, and social network and environment. It is important that clinicians recognize that clients' degree of identity with their culture of origin and the majority culture are not necessarily related. Instead of assuming a "zero-sum model" in which the person is viewed as high on one dimension of identity and low on the other, a client may have a low or high sense of identity on each dimension. Cultural factors influence how individuals conceptualize and thus report their mood symptoms. For example, Hispanic-American adults tend to emphasize somatic symptoms more so than emotional or mood-related symptoms, and also are less likely to distinguish between mood and somatic symptoms (for review, see Lewis-Fernandez et al., 2005). A similar pattern has been found with older adults, who may present with more somatic symptoms or anhedonia, and less depressed or mood-focused symptoms (Gallo & Rabins, 1999). Thus, the clinician likely will gather better information for diagnosing a mood disorder by utilizing a biopsychosocial conceptualization, validating the individual's somatic symptoms as a "real" effect of their illness or stressor, and becoming familiar with specific cultural idioms (e.g., the concept of "nervios" in many Latino cultures (Lewis-Fernandez et al.). The clinician also should assess the client's symptoms in relation to norms of the client's cultural reference group to avoid under or overpathologizing symptoms.

8.6.4 Biopsychosocial Assessment

Individuals from underserved populations, particularly those from lower socioeconomic status or older adults, frequently have complex, multidimensional problems associated with their mood disorder. Such problems may include physical illness and limitations, limited income, poor social support networks, and unsafe or unstable housing situations. These individuals also may view their mood symptoms in relation to these other problems, complicating identification of symptoms. For example, an unemployed, low-income client may primarily discuss their concerns related to job-seeking, rather than their mood symptoms. Or an older adult may talk about his or her loneliness rather than depression (Barg et al., 2006). Thus, to fully explore mood symptoms and develop a comprehensive treatment plan, the clinician needs to conduct an assessment of clients' multidimensional needs. Some formal assessment tools exist for this purpose. For example, the *Camberwell Assessment of Need* (Phelan et al., 1995) is a validated tool that guides an interviewer to assess for needs across multiple life domains (e.g., accommodation, food, self care, transportation), based on information from clients, informants, and clinicians. Versions exist for adults, older adults, individuals with learning disabilities, individuals in forensic settings, and mothers. Advantages of this type of assessment include rapport-building, case conceptualization (i.e., gaining a comprehensive understanding of factors contributing to and affected by the mood symptoms), and treatment planning, with regard to case management needs. In fact, regarding implications for treatment planning, research indicates that low-income individuals with depressive disorders can experience reductions in depressive symptoms from case management without use of psychotropic medications or formal psychotherapy (Areán et al., 2005; Miranda, Azocar, Organista, Dwyer, & Areán, 2003).

8.6.5 Adjusting Assessment Procedures

In addition to assessing a client's multidimensional needs, the interviewer may need to adjust the assessment process to accommodate these multidimensional needs. For example, the clinician may need to be flexible regarding the time of day and the location for meeting, such as if the client has other responsibilities such as work or caregiving, depends on others for transportation, or has physical limitations that limit ability to travel to certain clinical settings. For a client with communication difficulties, the clinician may want to consider multimodal communication strategies, such as written cues or oral administration of paper-and-pencil questionnaires. For a client with physical limitations, the clinician should inquire about the client's best time of day and may need to schedule breaks or assessments across multiple time periods. Nonetheless, it has been our experience that physically frail clients can endure lengthy assessments as long as the clinician develops good rapport, orients the client to the length of the assessment, remains alert for signs of fatigue, and offers breaks or rescheduling.

8.7 Information Critical to Making a Diagnosis

Several considerations are important when making a diagnosis, including several areas already discussed, such as the nature of the symptoms, functional impairment or distress, cultural diversity, socioeconomic status, and health status, differential diagnosis, and use of specifiers.

8.7.1 Differential Diagnosis of Unipolar and Bipolar Disorders Using DSM-IV Criteria

The importance of differential diagnosis cannot be understated. Accurate diagnosis impacts the clinician's ability to prescribe and deliver appropriate treatments and to predict clinical outcomes. Whereas the presence of manic or hypomanic episodes may appear to easily differentiate between unipolar and bipolar disorders, when assessing an individual, the distinction may not always be so readily apparent. One challenge relates to the issue of self-reported mood. Determining what is a "normal good mood" that may occur during remission of MDD or DYS versus an "unusually high or elevated mood" that occurs during a manic or hypomanic episode in bipolar I can be a challenge. For example, with chronic MDD, or with DYS, the person may have felt unusually down or depressed for such a long period of time that *any* increase in mood may seem unusually high. In this case, the person would respond positively to questions designed to capture mania (e.g., person required less sleep than usual because their "usual" during the chronic depression was 10 or more hours of sleep).

A second difficulty in differentiation has to do with determining the difference between the self-reported atypical or irritable symptoms in MDD and the irritable mood that occurs with the bipolar disorders, which may be qualitatively different, but unclear to the person who has never experienced both. Fortunately, these symptoms are not the sole criteria upon which to base a diagnosis. Careful questioning and eliciting examples can provide necessary detail to assist in determining if the self-reported description of "elevated" or "irritable" mood meets criteria for abnormal functioning. In addition, a number of additional symptoms should be taken into account before a definitive diagnosis is made, such as sleep disturbances. People with MDD tend to desire more or better sleep, whereas individuals with bipolar disorders report less of a desire or need for sleep and are often doing some activity during normal sleeping hours (Joiner et al., 2005).

8.7.2 Use of Specifiers

The *DSM-IV-TR* (APA, 2000) utilizes a number of standard specifiers to describe the clinical status of the most recent mood episode. The first type is specifiers that qualify symptom features of the various mood disorders. The four specifiers that fall under this category include: with melancholic features, with atypical features, with catatonic features, and with postpartum onset. For example, consider the specifiers commonly used with major depressive disorder. *Melancholic features* refer to a person who is unresponsive to pleasant or pleasurable stimuli, who tends to experience the depression as being worse in the morning, and who reports excessive feelings of guilt. *Atypical features o*f depression include what is referred to as "mood reactivity," that is temporary lightening of mood in response to positive events, and the presence of at least two of the following: increased appetite or weight gain, hypersomnia (greater than 10 h of sleep per day), feeling as if the arms or legs are weighed down (leaden paralysis), and an extreme sensitivity to rejection in relationships. Atypical features are more commonly reported in women than men and tend to be associated with an earlier age of onset (APA).

Support for the melancholic subtype of depression is mixed with some researchers concluding that the subtype has validity and clinical utility. For example, some research reports that melancholic features predict good response to ECT. Support for the atypical subtype seems to be stronger. Research reports that atypical features predict good response to monamine oxidase inhibitors. The reader is referred to Quitkin, McGrath, Stewart, and Klein (2003) for a more thorough discussion of atypical features.

Catatonic features, on the other hand, can be found with a major depressive, manic, or mixed episode. To qualify for this specifier, the affected person should be experiencing at least two of five symptoms (a) motoric immobility or hyperactivity, (b) mutism, (c) rigid posture that resists movement (i.e., extreme negativism), (d) inappropriate posturing or grimacing, and (e) senseless repetition of other people's words (echolalia) or gestures (echopraxia) (APA, 2000). Typically this specifier is rarely used, but can occur with severe presentations of the mood disorders. Catatonic features are more likely to be found in inpatient psychiatric settings, but still occur at low rates (5–9% of inpatients) (APA).

Lastly, *postpartum onset* may be seen in women who are experiencing either a major depressive, manic, or mixed episodes that occurs within 4 weeks after childbirth (APA, 2000). Women who have had a previous psychiatric history of having a mood disorder (particularly bipolar I or a family history of bipolar disorders) are at increased risk of developing a postpartum episode.

The second type of specifiers is *severity* specifiers. These specifiers include mild, moderate, severe with psychotic features and severe without psychotic features. The severity specifiers are discussed in more detail within the specific disorders section. The third type of specifiers address the *chronicity* of the mood disorder. Chronic specifiers are given when the episode has lasted continuously for a minimum of 2 years. This specifier is typically used with MDD, and is used in situations with bipolar I or bipolar II only if it refers to a major depressive episode that is the most recent type of mood episode. The last type of specifier categorizes the *onset* of the disorder. This specifier is used with dysthymic disorder only, and refers to whether the disorder presented before (early onset) or after the age of 21 years (late onset).

The *DSM-IV-TR* (APA, 2000) also utilizes a number of standard specifiers to describe the *course* of recurrent mood episodes. The course can be characterized by a *cyclical* or *seasonal* pattern, or by the amount of recovery evidenced in between episodes. Recovery can be characterized as *full remission* such that the person is symptom-free between the recurrent episodes or *partial remission* of symptoms during the interepisode period. The use of course and chronicity specifiers have important implications for treatment. For example, Joiner et al. (2005) report that early onset of symptoms, the severity of the past episode, the presence of psychotic symptoms with a mood episode, and recurrence of episodes are all suggestive of a negative prognosis.

8.8 Dos and Don'ts

Proper assessment and diagnosis of mood disorders can be invaluable in bringing timely and appropriate treatments to the affected person. However, for this to occur, the clinician needs to keep several things in mind:

Do:

- Use validated, standardized interview tools, supplemented by self-report scales and individualized assessment.
- Use a cultural formulation assessment process.
- Assess the client's biopsychosocial needs.
- Be flexible with assessment scheduling, location, and procedures with clients who have complex medical or social needs.
- Educate the client about the assessment process, including its purpose, procedures, and how the results will be used. Do also elicit the client's questions and concerns.
- Involve the family as appropriate and preferred by the client.

Don't:

- Make assumptions about a client based on group status (e.g., race, ethnicity, age).
- Assume a "zero-sum model of acculturation" (p. 281, Lewis-Fernandez & Diaz, 2002); clients' level of acculturation within their origin and majority cultures are not necessarily dependent on one another.
- Overpathologize what is considered normative within a given culture or dismiss what is abnormal within a culture (Lewis-Fernandez & Diaz, 2002).
- Assume that depression is a natural part of aging.
- Attend primarily to family members, ignoring the client who may be more challenging to communicate with due to language or cognitive barriers.

In summary, mood disorders are common and are costly to the individual, families, and society. Unfortunately, many people with mood disorders are either untreated or poorly treated. Early identification through good clinical interviewing and assessment can help to identify people who could benefit from treatment and assist in delivering appropriate treatment.

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Chapter 9
Schizophrenia

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9.1 Description of the Disorder

Schizophrenia is a complex, heterogeneous disorder that is often confusing and frightening not only for the individual who experiences it, but also for family members, health providers, and others that he or she encounters in day-to-day life. Diagnosis of schizophrenia poses many challenges but an accurate diagnosis is critical to the provision of appropriate information and treatment recommendations to individuals and their family members. Unlike most disorders in medicine, the symptoms of schizophrenia cannot be linked to a specific pathophysiological mechanism, and must be assessed solely on the basis of observations, verbal reports, and inferences. Thus, self-report is central to making a diagnosis. However, for various reasons, individuals with schizophrenia may either be reluctant or have considerable difficulty describing their experiences. This may be due to the direct effects of symptoms but can also be compounded by poor insight and cognitive impairment. Additionally, high rates of substance use, mood symptoms, and traumatic experiences in this population can complicate self-reporting and the differentiation of schizophrenia symptoms from these other factors. In this chapter, we will describe these challenges in more detail and offer strategies to address them in the context of clinical and diagnostic interviews.

Over the past 100 years, there has been a growing recognition of schizophrenia as a syndrome with a distinct constellation of symptoms, a variable course, and a range of other associated features. We have learned a great deal about many aspects of this disorder although there is still a great deal more about schizophrenia to be learned, particularly in the realms of etiology, pathophysiology, and successful treatments. In this section, we will provide a brief background of what is currently known about the prevalence, course, etiology, characteristic symptoms, associated features, treatments, and outcomes. We will then outline procedures for gathering

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information, present case illustrations, discuss the impact of race, culture, diversity, and age on diagnosis, summarize the information critical for making a diagnosis, and conclude by presenting suggestions for the “do’s and don’ts” of conducting diagnostic interviews with individuals who are believed to have schizophrenia.

9.1.1 Prevalence, Etiology, and Course

Schizophrenia is among the top ten leading causes of disability world-wide (World Health Organization, 2001). It is estimated to affect approximately 1% of the population and is slightly more prevalent among males than females (Aleman, Kahn, & Selten, 2003). The typical age of onset is during adolescence or early adulthood. Genetic factors play a strong role in the etiology of schizophrenia and a number of different genes are implicated in increased risk for schizophrenia (e.g., Cannon, Kaprio, Lonnqvist, Huttunen, & Koskenvuo, 1998; Li & He, 2007). However, no single genetic factor has consistently been identified, suggesting that multiple genes may interact in the etiology of this complex disorder. In addition, several environmental factors are associated with slight but reliable increases in risk for schizophrenia. These include prenatal infection (Mednick, Machon, Huttunen, & Bonett, 1988), obstetric and perinatal complications (Geddes & Lawrie, 1995, Cannon, Jones, & Murray, 2002), social stress (Norman & Malla, 1993), winter/spring season of birth (McGrath & Welham, 1999), older paternal age (Wohl & Gorwood, 2007), and cannabis abuse (Moore et al., 2007; see Tandon, Keshavan, & Nasrallah, 2008 for a summary of “facts” about schizophrenia).

Historically, schizophrenia was considered to be a progressive disease with a poor and deteriorating course (McGlashan, 1998). However, several studies of long-term outcome in schizophrenia have found that most individuals with schizophrenia experience a stable or fluctuating course, about a third show a worsening over time, and a smaller portion of individuals experience lasting improvements (e.g., Carpenter & Strauss, 1991; Ciompi, 1980; Harding, 1988). A review of several long-term follow-up studies found 40–76% of patients demonstrate an “undulating” course pattern characterized by variations in the severity of symptoms over time (Harding, 1988). Although symptoms may be quite variable over time, the cognitive and functional deficits associated with schizophrenia frequently both predate the onset of psychotic symptoms and persist even during periods of symptom remission (Jones, Rodgers, Murray, & Marmot, 1994; Keshavan, Diwadkar, Montrose, Rajarethinam, & Sweeney, 2005; Mueser, Bellack, Douglas, & Morrison, 1991; Rund, 1998).

9.1.2 Characteristic Symptoms and Associated Features

Conceptualizations of schizophrenia and its diagnostic criteria have fluctuated over the past century and have been influenced by historical, cultural, and social factors as well as the state of our scientific knowledge. However, hallucinations and delusions

Table 9.1 Diagnostic criteria for schizophrenia

Criterion	Description
A. Characteristic symptoms (active phase)	Two or more of the following: delusions, hallucinations, negative symptoms, disorganized speech, or behavior[a] Time frame: At least 1 month (or less if successfully treated)
B. Social/Occupational dysfunction	One or more areas of functioning (e.g., work, interpersonal, self-care) are impaired Time frame: significant portion of time since the onset of disorder
C. Duration	Some sign of disturbance or impairment (can be less severe or fewer symptoms) precede or persist after active phase (Criterion A) for at least 6 months
Exclusion criterion	
D. Schizoaffective and mood disorder exclusion	Active phase symptoms (Criterion A) do not occur concurrent with mood episode or if mood episode is present it is brief
E. Substance use and general medical condition exclusion	Symptoms or disturbance are not due to drug use or withdrawal, medication, or a medical condition
F. Relationship to Pervasive Developmental Disorder (PDD)	If there is a history of autism or PDD, a diagnosis of schizophrenia is only given if there is an active phase consisting of prominent hallucinations or delusions

[a]*Note*: Only one symptom is necessary to fulfill this criterion if delusions are bizarre, or auditory hallucinations include two or more voices conversing with each other or a voice commenting on the individual's behavior or thoughts
Adapted from DSM-IV-TR (APA, 2000)

(i.e., positive symptoms) and negative symptoms have been noted as features that distinguish schizophrenia from other disorders dating back to Kraeplin's writings on dementia praecox (1904) and Bleuler's work (Bleuler, 1972). The current *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association [APA], 2000) diagnostic criteria for schizophrenia are summarized in Table 9.1. The core symptoms of schizophrenia generally have been divided into two categories: positive symptoms (i.e., the presence of experiences that do not typically occur in the absence of schizophrenia) and negative symptoms (i.e., representing a reduction or loss of normal function). Factor analytic studies of symptoms suggest that a three factor distinction may be more representative of clinical data (Kay & Sevy, 1990; Liddle, 1987). Specifically, symptoms of disorganized speech and behavior appear to cluster together somewhat independently of hallucinations/delusions or negative symptoms.

9.1.3 Positive Symptoms

Hallucinations are the most frequent type of positive symptoms and may occur in any sensory modality, but are most commonly auditory. Auditory hallucinations generally occur when the individual hears a voice or voices that are not their own and cannot be heard by others. The voices sometimes tell the person what to do (i.e., command hallucinations), sometimes comment on the person's thoughts or actions, may consist of more than one voice having a conversation with each other, or may consist only of sounds rather than voices. Hallucinations are distinct from the person's own thoughts and need also to be distinguished from the isolated experience of hearing one's name called out or the experience of voices heard either right at the time of descent into sleep (i.e., hypnagogic hallucinations) or right at the time of waking (i.e., hypnapompic hallucinations), which are commonly experienced in the absence of schizophrenia.

Delusions are defined as "erroneous beliefs that usually involve a misinterpretation of perceptions or experiences" (DSM-IV-TR, p. 299). The content of delusions can be quite variable but generally fall into one of several categories: grandiose delusions, persecutory delusions, delusions of reference, or delusions of having one's thoughts or actions controlled by an outside entity. Delusions are considered to be bizarre if they are clearly implausible and disconnected from typical life experiences or the cultural context of the individual's experience.

Severe disorganization of thoughts or behavior is a subset of positive symptoms that have been shown to be relatively distinct from hallucinations and delusions. These refer to abnormalities in the process, structure, and form of thoughts or behaviors. In the context of a diagnostic interview, disorganization of thought can most readily be identified by observations of the person's speech patterns (e.g., loose associations, tangentiality, or incoherent speech) during the interaction. Disorganization of behavior often manifests as unusual motor behaviors such as pacing, rocking, or other odd or erratic movements. Severe disorganized behavior can result in the inability to appropriately maintain activities of daily living such as personal hygiene, grooming, and dressing. For example, an individual presenting in an interview with poor hygiene and grooming or wearing clothing inconsistent with the season (e.g., winter coat and hat) may be experiencing symptoms of disorganized behavior. Catatonia (i.e., absence of movement or waxy flexibility) can also occur in schizophrenia but is less common than the other positive symptoms.

9.1.4 Negative Symptoms

Negative symptoms represent a diminution or absence of emotions, thoughts, or behaviors that are typically present in individuals who do not have schizophrenia. Anhedonia and affective flattening are reductions in the experience and expression of emotion, respectively. Alogia, or poverty of speech, is characterized by a diminished ability to carry out meaningful conversation whereas avolition refers to an absence or reduction in the ability to initiate or sustain goal-directed behaviors. Asociality specifically refers to lack of interest or engagement with other people. Negative symptoms are often challenging to assess and distinguish from depressed mood, secondary effects of positive symptoms (e.g., social isolation due to paranoid delusions), medication side effects, cognitive impairment, and medical disorders with similar presentations.

9.1.5 Associated Features

In addition to positive and negative symptoms, schizophrenia is associated with a range of problems in multiple domains. Poor social, educational, and vocational functioning are quite common, as are cognitive deficits such as impairments in verbal memory, concentration, and abstract reasoning. Depressed mood, anxiety, and severe irritability or anger are also prevalent. Risk of suicide is higher among persons with schizophrenia than in the general population. Subjective quality of life is frequently poor.

9.1.6 Treatments and Outcomes

Antipsychotic medications are the treatment of choice for schizophrenia, both for acute exacerbations of positive symptoms and for preventing symptom relapses. However, most individuals with schizophrenia continue to experience some residual symptoms even when medications are optimized and adherence to medication regimens is good. In addition, current medications have little, if any, benefit for negative symptoms, social disability, and cognitive deficits. Effective psychosocial interventions have been developed to ameliorate residual positive symptoms (e.g., cognitive-behavior therapy), interpersonal deficits (e.g., social skills training), functional difficulties (e.g., supported employment), and cognitive deficits (e.g., cognitive remediation). Optimal treatment for schizophrenia includes both medication and specific psychosocial interventions tailored to each individual's stage of illness, current clinical status, personal goals, and social needs.

9.2 Procedures for Gathering Information

The information needed for making a diagnosis of schizophrenia involves the interviewee's self report, behavioral observation and if possible collateral information. The clinical interview is the primary vehicle for gathering a description of symptoms and functioning. As such, it is critical to create a comfortable interview experience conducive to obtaining the most accurate information. In large part, this can be accomplished through use of standard clinical skills involved in developing rapport and by adopting a matter of fact approach to the interview. It is also helpful to provide a careful description of the purpose of the interview and its duration. If feasible, offering the interviewee the opportunity to take a brief break if he chooses can also enhance rapport and participation in the interview.

We have found that the Structured Clinical Interview for DSM-IV-TR Axis I Disorders (SCID-I; First, Spitzer, Gibbon, & Williams, 2002) is a useful way to organize the diagnostic interview and a good prototype on which to base a clinical interview. It has a standardized format that is comprehensive yet is flexible enough to allow the clinician to pursue additional follow-up questions or clarifications as he or she is determining whether or not diagnostic criteria are fulfilled. It can be tailored for the individual's clinical presentation and is well suited for diagnosis of schizophrenia. The SCID is divided into modules that correspond to DSM-IV-TR disorders and includes standard questions for eliciting symptoms for each specific diagnostic criterion as well as appropriate rule-outs for each disorder. Each diagnostic criterion is rated as "absent," "subthreshold," or "threshold" (i.e., present). Two SCID modules, the Psychotic Symptom Module and the Psychotic Disorders Module, provide most of the information needed to make (or rule out) a diagnosis of schizophrenia. The Psychotic Symptom Module addresses specific symptoms associated with schizophrenia. The Psychotic Disorders Module provides a series of questions to determine how to best classify the identified psychotic symptoms (e.g., a psychotic mood disorder vs. schizophrenia). The interview is intended to be supplemented with all available information when making a diagnosis (First, Gibbon, Spitzer, & Williams, 2002). In clinical settings, this information can often include the medical record (e.g., an inpatient admission or discharge note), referral information, and observations from family members and other clinicians.

The SCID begins with an overview that includes a series of questions designed to gather background information on demographics, work history, mental health treatment history, current mental health problem, and substance use history. This overview serves several purposes. It allows the interviewer to develop rapport with the interviewee by gathering more general information with questions that tend to be nonthreatening. It provides the opportunity to obtain, from the interviewee's perspective, general information about mental health history, the nature of the onset of illness and mental health treatment. This information can inform the interviewer's initial hypotheses about diagnosis and which symptom domains to follow up on in greater detail later in the interview. The overview is also an excellent chance to observe how the person behaves in the interview situation and how he or she responds to questions. These observations can be critical in diagnostic interviews for schizophrenia. For example, what is the *quantity* of information contained in responses? Is there a paucity or overabundance of information (i.e., circumstantiality)? How *coherent* are responses? Are they logical and straightforward or tangential (i.e., responses include information only loosely related to the questions)? What is the *quality* of information provided? Does the interviewee minimize or deny symptoms? Provide vague or detailed descriptions? On the basis of these observations the interviewer may need to tailor the remainder of the interview to maximize the quality of information as well as the efficiency with which it is obtained.

9.3 Case Illustrations

Here we briefly describe some clinical vignettes that illustrate some of the characteristic symptoms that one will encounter in interview. These vignettes are not from a single case but instead represent an amalgamation of several clinical interviews that were selected to illustrate relevant symptoms. Table 9.2 also includes descriptions of these symptoms as well as behavioral symptoms (e.g., negative and disorganized symptoms) associated with schizophrenia.

Table 9.2 Descriptions of characteristic symptoms of schizophrenia from symptom rating scales

Characteristic symptom	Item description with sample anchors
Delusions[a]	Unusual, odd, strange, or bizarre thought content. Include thought insertion, withdrawal, and broadcasting. Include grandiose, somatic, and persecutory delusions *Very mild* ideas of reference (people stare/laugh at him/her). Ideas of persecution (people mistreat him/her). Unusual beliefs in psychic powers, spirits, UFOs. Not strongly held. Some doubt *Moderate* delusion present but not strongly held – functioning not disrupted; *or* encapsulated delusion with full conviction – functioning not disrupted *Severe* full delusion(s) present with much preoccupation *or* many areas of functioning disrupted by delusional thinking
Hallucinations[a]	Reports of perceptual experiences in the absence of external stimuli. When rating degree to which functioning is disrupted by hallucinations, do not include preoccupation with the content of the hallucinations. Consider only disruption due to the hallucinatory experiences *Very mild* while resting of going to sleep sees visions, hears voices sounds or whispers in absence of external stimulation, but no impairment in functioning *Moderate* occasional verbal (auditory), visual, olfactory, tactile, or gustatory hallucinations (one to three) times but no impairment in functioning or frequent nonverbal (e.g., sounds or whispers) hallucinations *Severe* several times a day or many areas of functioning are disrupted by hallucinations
Disorganized speech[b] (thought disorder)	Disorganized process of thinking characterized by disruption of goal-directed sequencing (e.g., circumstantiality, tangentiality, loose associations, non sequitors, gross illogicality, or thought blocking *Mild* thinking is circumstantial, tangential, or paralogical. There is some difficulty in directing thoughts toward a goal, and some loosening of associations may be evidenced under pressure *Moderate* able to focus thoughts when communications are brief and structured, but becomes loose or irrelevant when dealing with more complex communications or when under minimal pressure *Severe* thinking is seriously derailed and internally inconsistent resulting in gross irrelevancies and disruptions of thought processes which occur almost constantly
Disorganized behavior[a,b]	Unusual and bizarre behavior, stylized movements or acts, or any postures which are clearly uncomfortable or inappropriate *Mild* eccentric or odd mannerisms or activity that ordinary persons would have difficulty explaining, e.g., grimacing, picking. Observed once for a brief period *Moderate* mannerisms or posturing maintained for 5 s or more that could make the patient stand out in a crowd *Severe* posturing, intense rocking, strange rituals that dominate patient's attention and behavior or Reports of behaviors that are odd or unusual. Not limited to interview period *Mild* peculiar behavior, (e.g., talking loudly in public, fails to make appropriate eye contact when talking with others *Moderately severe* highly unusual (e.g., wandering streets aimlessly, eating nonfoods, fixated staring in a socially disruptive way *Severe* unusual petty crimes (e.g., directing traffic, public nudity, contacting authorities about imaginary crimes)

(continued)

Table 9.2 (continued)

Characteristic symptom	Item description with sample anchors
Negative symptoms[b] (blunted affect)	Diminished emotional responsiveness as characterized by a reduction in facial expression, modulation of feelings, and communicative gestures *Mild* changes in facial expression and communicative gestures seem stilted, forced, artificial, or lacking in modulation *Moderately severe* affect generally appears "flat," with few changes in facial expression and a paucity of communicative gestures *Extreme* changes in facial expression and evidence of communicative gestures are virtually absent. Patient seems constantly to show a barren or "wooden" expression

Note: Mild level symptoms may not always meet the threshold of diagnostic criteria, but are listed here to provide the range of symptom presentation

[a] Adapted from BPRS (Lukoff et al., 1986)

[b] Adapted from PANSS (Kay et al., 1987)

9.3.1 Hallucinations and Delusions

This vignette includes description of positive symptoms leading to a recent psychiatric hospitalization. Note that delusional symptoms include delusions of reference and grandiose delusions and the auditory hallucinations are consistent in content with the grandiose delusions. Also note that the active symptoms were present for several months, gradually becoming more severe.

Interviewee (I): I was hearing voices. That was when it was getting really really bad. I was confused. I couldn't tell if the voices were real or not.

Clinician (C): Can you give me an example of this?

I: I was doing pretty well for myself. I had a job, an apartment, and a car and in the middle of everything I left to go to New York City. I saw a television show about Wall Street and I thought it was about me. I was getting messages from commercials, movies, from other people. When I interacted with people I got hidden messages from them. I believed that important financial people wanted me to go to New York City and that I would become rich if I went there.

C: How long had this been going on?

I: It had been going on for a while, like a couple of months, but it wasn't until I saw this particular television show that I was convinced that I was supernatural.

C: Tell me a little bit more about the voices. Did you hear more than one voice?

I: Yes, lots of voices at a time. They talked to each other, it was like they were worshipping me.

C: How were they were worshipping you?

I: They were saying things like: He is brilliant. We've never seen someone with so much genius. They told me my mom was only pregnant with me for 5 months

> and 3 days because the egg and the sperm were supernatural so as a baby I grew much quicker. I was special because I could walk at 2 months old and started kindergarten at 3 months old and finished high school at age 15.

The following is an example of an exchange in which an interviewee describes paranoid delusions about being monitored by the government:

Clinician (C): Has there ever been a time when you thought people were going out of their way to try to hurt you?
Interviewee (I): Well, they would come in my room at night and go through my things.
C: Can you tell me a little bit more about that?
I: They came in when I was sleeping and also when I wasn't there.
C: Who did you think was going through your things?
I: The government.
C: What did you think they were looking for?
I: The CIA is keeping an eye on me. They follow me when I'm outside too.
C: Why would the CIA be keeping an eye on you?
I: My therapist might work for them too. But I'm not sure about that. She has other things to worry about that are more important than me.
C: You said before that the CIA is keeping an eye on you. Why would they do that?
I: They want to find a way to lock me up. So I won't tell anyone the things I know. But I keep my eye out for them. When I see they've been there I know I need to be careful.
C: Can you tell me a little bit more about this?
I: Well, they leave little clues. They want me to know they are watching me. Like when they come in my room, I can tell.
C: How can you tell?
I: I can feel it. I can just tell.

9.3.2 Disorganized Speech

This brief exchange from an interview represents an extreme example of disorganized speech, that of derailment where an interviewee's response is largely unrelated to the original question. Furthermore, the response is largely incomprehensible indicating a relatively severe form of thought disorder.

C: What are some of the difficulties you had at work?
I: Well solving a mathematical problem for one thing. For solving the radius of the circle you divide the circle by quadrant upside and down, you take the hypotenuse of the quadrant and depending on the circumference of the circle divide it by the diameter of the quadrant.

9.4 Recommendations for Formal Assessment

In addition to the Psychotic Symptom and Psychotic Disorder modules of the SCID (described above) and standardized symptom interviews for psychotic symptoms (described below), additional assessments may be helpful in gaining a full understanding of the clinical presentation of an individual believed to have schizophrenia. For example, we have noted the prevalence of cognitive and functional impairment among individuals with schizophrenia. A thorough clinical evaluation would likely include some neuropsychological testing and assessment of social and occupational functioning. There are several reliable self-report and family/clinician administered psychosocial functioning assessment measures available (see Dickerson, 1997 for a review). Assessments of substance use, trauma history, and mood symptoms can also be critical to making (or ruling out) a diagnosis of schizophrenia and can inform treatment not just of psychosis but of the range of problems that commonly co-occur with schizophrenia.

9.5 Standardized Interview Formats

Determining a diagnosis of schizophrenia is based on the presence or absence of given symptoms. As discussed above, the SCID is one of the most commonly used instruments. Several other structured and semi structured interviews are also available. These are reviewed in detail elsewhere in this volume (see Chap. 2). Use of symptom rating scales can also be helpful in describing and qualifying the severity of symptoms. There are several symptom rating scales that are widely used in clinical and research settings. Familiarity with one or more of these scales can aid the newer interviewer with the definition and recognition of some of the characteristic symptoms of schizophrenia, particularly negative symptoms which are generally more difficult to assess. These measures were specifically designed to enhance the reliability with which these symptoms could be rated and they include training protocols or manuals and provide comprehensive behavioral descriptors for each symptom. Nevertheless, their administration also requires clinical sensitivity and judgment. We briefly describe some of the most commonly used scales.

The Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962) is one of the oldest and most established clinician-rated scales. It contains 18 items that cover a range of psychiatric symptoms typically observed in hospitalized patients, each of which is rated on a 7-point scale ranging from “not present” to “extremely severe.” The symptoms covered by this scale not only correspond with positive and negative domains of schizophrenia but also include coverage of anxiety and depressive symptoms. The UCLA Clinical Research Center for Schizophrenia and Psychiatric Rehabilitation has developed an expanded 24 item BPRS that is manualized and includes additional items to evaluate symptoms indicative of a relapse (e.g., suicidal ideation, mania), more detailed behavioral anchors, and additional probe questions to elicit symptoms (Lukoff, Liberman, & Nuechterlein, 1986; Ventura, Green, Shaner, & Lieberman, 1993). The BPRS has consistently demonstrated good psychometric properties, is widely used, and considered a "gold standard" in treatment research for schizophrenia.

The Scale for the Assessment of Negative Symptoms (SANS; Andreasen, 1983; 1982) includes items developed to assess the major negative symptoms associated with schizophrenia: affective flattening, alogia, avolition, and anhedonia. The Scale for the Assessment of Positive Symptoms (SAPS; Andreasen, 1984) is a companion scale developed to assess the major positive symptoms associated with schizophrenia: hallucinations, delusions, bizarre behavior, and formal thought disorder. The items for both scales include clear definitions and defined observable components, each of which is rated on a 6-point scale of "not observed" to "extreme." Both scales are psychometrically sound and widely used. The SANS may be particularly useful to a novice interviewer as negative symptoms tend to be more difficult to identify and rate reliably.

The Positive and Negative Syndrome Scale (PANSS; Kay, Fiszbein, & Opler, 1987) was developed to be a relatively brief yet comprehensive assessment of symptoms of schizophrenia. It consists of 30 items that are adapted from the BPRS and other psychopathology measures. Each item is carefully defined and includes detailed behavioral anchors relevant to the symptom in question. Items can be summed to represent a positive, negative, and general psychopathology scale. An accompanying structured clinical interview is available to facilitate the elicitation of symptoms and their rating (Opler, Kay, Lindenmayer, & Fiszbein, 1992).

9.6 Impact of Race, Culture, Diversity, and Age

As with any diagnostic interview or clinical encounter, the impact of race, ethnicity, age, and other individual differences must be taken into consideration when conducting an interview with an individual who may have schizophrenia. It is incumbent on the interviewer to be knowledgeable about common experiences, as well as the cultural and social contexts, of the patients they see. There are some diversity considerations specific to diagnosing schizophrenia that are worth noting. For example, delusional beliefs frequently contain spiritual or religious themes. However, before concluding that a belief is delusional it is important to gain an understanding of the individual's spiritual experiences as well as the normative religious beliefs in their family, culture, or community. Different cultures and religious traditions have widely divergent beliefs about communication with God, communication with deceased individuals, and the role of God (or gods) in determining one's path or fate in life.

With regards to race, it is notable that African Americans are diagnosed with schizophrenia more often than Whites whereas Whites are more likely to be diagnosed with a mood disorder (see Hampton, 2007 and Lawson, 2008 for reviews). Various hypotheses for this difference have been proposed, including clinician bias, differences in clinical presentation (e.g., a higher prevalence of psychotic symptoms in mood disorders among African Americans), delay of mental health treatment among African Americans until symptoms are severe, and “healthy paranoia” that is misinterpreted by clinicians. To avoid the over-diagnosis of schizophrenia in African Americans, diagnostic interviews with individuals who appear to have psychotic symptoms need to include a thorough assessment of mood symptoms and a careful consideration of the sociocultural background of the interviewee.

The onset of schizophrenia occurs most often in late adolescence or early adulthood with a slightly older average age of onset for women than for men. The peak age onset for males is 21–25 years and for females it is 25–30 years. Positive symptoms are most severe during the first few years of the illness, after which most people experience a stabilization or reduction in symptom levels as they age. Negative symptoms and cognitive impairments do not appear to decline with age or duration of illness. Thus, clinical presentation may vary over time and the age of the interviewee, as well as when they report their symptoms to have started, are important considerations.

9.7 Information Critical to Make a Diagnosis

According to DSM-IV-TR, a diagnosis of schizophrenia is based on fulfilling three basic criteria reflecting the presence of characteristic symptoms, social/occupational dysfunction, and the duration of illness as well as by ruling out other conditions that can account for psychotic symptoms (APA, 2000).

9.7.1 Criterion A: Characteristic Symptoms

Two or more of the following five symptoms must be present: delusions, hallucinations, disorganized speech, disorganized behavior, and negative symptoms. Examples of characteristic positive symptoms are included in the case illustrations above. Disorganized speech and behavior and negative symptoms are evaluated based on behavioral observation. Table 9.2 shows some sample descriptions of these symptoms taken from select items the rating scales described above. In certain cases, only one symptom is necessary to fulfill this criterion. These include: delusions that are notably bizarre (e.g., a belief that an alien force is controlling one’s thoughts or actions), auditory hallucinations that include a voice making a running commentary about the individual’s thoughts or actions or two or more voices conversing with each other. In addition to determining the presence of these symptoms, the interviewer must also determine that symptoms must have been present for the majority of time for at least a month. In the case that symptoms remit with appropriate treatment within a month, this criterion can still be met if it is judged that symptoms would persist without treatment.

9.7.2 Criterion B: Social/Occupational Dysfunction

There also must be evidence that there has been marked decrease in functioning for a substantial portion of time since the onset of disorder. Individuals with schizophrenia often experience high rates of unemployment and significant impairments in occupational functioning (Cook & Razzano, 2000; Marwaha & Johnson, 2004) and can experience substantial limitations in social and instrumental functional activities (Bellack, Morrison, Wixted, & Mueser, 1990; Patterson, Goldman, McKibbin, Hughs, & Jeste, 2001). Evaluating these impairments in an interview setting can be difficult. Often this information can be gathered in an overview section where educational and work history is typically covered. The interviewer should be listening for any difficulties the interviewee had with schooling, maintaining a job, or periods of unemployment. For individuals who are employed, it is useful to identify if there is a discrepancy between educational attainment or training and current occupation. For example, an individual who is originally trained as a computer programmer but is currently only working 20 h per week in an unskilled labor position is likely "underemployed." In this case, further inquiry may reveal that after the onset of symptoms full time employment in a demanding technical field became too stressful and unmanageable. Functioning in other domains such as social, self-care and related activities of daily living should also be assessed to determine if this criterion is fulfilled. Although some of this information may be gathered through interview, obtaining information through observation and from additional sources (family members, medical record) can also be very helpful. Comparing the person's educational or occupational attainment with his parents or unaffected siblings can also be informative in determining if there is a decline in functioning (APA, 2000).

Two caveats are warranted related to evaluating this criterion. First, in the case of social and occupational functioning, it is important to differentiate between limited *opportunities* for socializing and work and actual impairment. In certain settings, other socioeconomic factors such as poverty, high unemployment, or crime may limit the access to work and social activities, and this should be taken into account when determining whether an individual meets the criterion for functional disability. Second, when evaluating younger individuals it is useful to consider whether there has been a failure to achieve expected levels of functioning in these domains (e.g., was the individual unable to complete school) and these should be considered when evaluating this criterion.

9.7.3 Criterion C: Duration

There must be evidence that some form of impairment or disturbance has persisted for 6 months with at least 1 month of active phase symptoms (i.e., Criterion A). The DSM-IV-TR does not specify a sequence to the duration of symptoms. That is, individuals can experience difficulties for several months leading up to the emergence of active phase symptoms or alternatively, experience an acute episode followed by residual symptoms over the course of several months. Obtaining collateral information from family members can be particularly helpful when evaluating this criterion, particularly for individuals presenting for mental health treatment for the first time.

9.7.4 Rule Outs and Differential Diagnosis

Psychotic symptoms are not exclusive to schizophrenia and therefore one must rule out other conditions that might account for these symptoms. The most common conditions include: mood disorders with psychotic features, substance-related disorders, post-traumatic stress disorder (PTSD), and general medical conditions.

Mood disorders. To make a diagnosis of schizophrenia, the active phase symptoms must not be accompanied by a mood episode or if a mood episode is present it can only have minimal duration relative to active phase psychotic symptoms. This determination can be diagnostically challenging for several reasons. First, behavioral symptoms associated with depression closely resemble the negative symptoms of schizophrenia. Second, the psychomotor agitation and flight of ideas associated with mania can in some cases be mistaken for thought disorder or behavioral disorganization. Third, epidemiological data indicated that 14–19% of those diagnosed with a major depressive episode experience psychotic symptoms (Johnson, Herwath, & Weissman, 1991; Ohayon & Schatzberg, 2002). In the case where the interviewee endorses both mood and psychotic symptoms, the interviewer must determine a time course for these symptoms. In the interview, it is often helpful to focus on a specific episode and/or psychiatric admission. This approach allows the interviewer to anchor questions to a specific time frame and thus increase the accuracy and reliability of responses. In some cases, it may be clear that the person only experienced delusional symptoms, for example, when clearly in a manic episode, or experienced auditory hallucinations only during a depressive episode. In these cases, a mood disorder with psychotic features diagnosis would be given. The following vignette demonstrates an example of how an interviewer might differentiate between a mood disorder with psychotic features and schizophrenia in an individual who has endorsed symptoms of depression:

Clinician: Have you ever heard voices that other people could not hear?
Interviewee: Yes.

C: Can you tell me a little bit more about that?

I: Well, when I'm depressed, I hear this voice, it sounds a little bit like my father but I know it's not him. It says things like "You're no good anyway." "You've never been any good." "You should die." When I hear it I just don't even want to get out of bed.

C: Is it always just one voice?

I: Yes, just one.

C: Have you ever heard it at a time when you were not feeling depressed?

I: No.

C: So, let me make sure I have this straight, you sometimes hear a voice criticizing you when you are depressed and you only hear it when you are depressed. You never hear it when your mood is okay. Is that right?

I: That's right.

Schizoaffective disorder. For individuals where both psychotic symptoms and mood symptoms are prominent a diagnosis of schizoaffective disorder may be warranted. The DSM-IV-TR criteria for schizoaffective disorder specify that both mood episode (depressed, manic, or mixed) and active phase psychotic symptoms must occur concurrently, mood symptoms must be present for a predominant portion of the duration of illness but there must also be at least a 2-week period where hallucinations or delusions occur in the absence of a mood episode (APA, 2000).

Schizoaffective disorder is less common than schizophrenia (Perälä et al., 2007) and determining the time course and sequence of these symptoms is challenging within a single interview session. Gathering historical clinical data from mental health providers, the medical record or family members can help in this determination. Often people may need to be followed over time to fully clarify their diagnoses. Indeed, a recent 2-year longitudinal study of stability of DSM-IV diagnosis in first episode psychotic patients found that when a diagnosis was changed at a follow-up interview the most common new diagnosis given was schizoaffective disorder, suggesting that a longer time period is needed to determine the presence of affective symptoms (Salvatore et al., 2009).

Substance-related disorders. There is a high prevalence of substance use disorders (SUD) among people with schizophrenia (Blanchard et al., 2000; Mueser et al., 1990; Regier et al., 1990), and SUDs have a profoundly negative impact on course of illness, outcomes, and other quality of life indicators (Bennett & Barnett, 2003; Dixon, 1999). Substance use and withdrawal can also induce psychotic experiences. Therefore, in making a diagnosis of schizophrenia it is critical to determine that the reported symptoms are not accounted for by substance use or withdrawal. In the case that the interviewee has an identified substance use problem there are several tacks the interviewer can take to differentiate psychotic symptoms associated with schizophrenia as opposed to substance use. A first approach is to identify a period of time when the interviewee was not using drugs and assess if psychotic symptoms were present. This may be an extended period of sobriety or a period of time when he or she may have been in a restricted environment such as an inpatient psychiatric unit without access to illicit substances. When such a period is not present, cases of extended substance use overlapping with psychotic symptoms will require the interviewer to make some clinical judgments. A qualitative evaluation of psychotic symptoms may be informative. For example, are the symptoms characteristic of the drug of abuse (e.g., paranoia during excessive cocaine use, hallucinations during alcohol withdrawal) or are they notably bizarre or unusual (APA, 2000). Another approach is to evaluate the longitudinal course of psychotic symptoms and substance use. Did psychotic symptoms precede the initiation of substance use? Do psychotic symptoms wax and wane with substance use or seem to follow an independent trajectory? Conversely, are there periods of increased psychotic symptoms in the absence of substantial increase or decrease in substance use?

General medical conditions. Ideally, a diagnostic interview should be preceded by a careful physical examination and laboratory tests to rule out medical conditions that may account for psychotic symptoms. This is particularly relevant when a patient is presenting with psychotic symptoms for the first time.

Post-traumatic stress disorder (PTSD). Although not a specific exclusion criterion for schizophrenia, interviewers should be aware that the symptoms and behavioral concomitants of PTSD and schizophrenia can overlap (see Chap. 17 of this volume for additional information about diagnostic interviewing for PTSD). For example, trauma-related flashbacks associated with PTSD may be experienced and described as hallucinations and must be carefully assessed. Behaviorally, individuals with either diagnosis may be described as paranoid and isolate themselves from others. Whether this represents an avoidance symptom of PTSD or "true" paranoia can usually be ascertained through careful interview. Complicating this further, many individuals with schizophrenia have experienced traumatic life events and may in fact meet diagnostic criteria for both disorders (e.g., Mueser et al., 1998) or they may have delusional beliefs about traumatic events that did not actually occur. The following vignette illustrates and interviewer's attempt to determine whether a voice heard by the interviewee is related to PTSD or schizophrenia.

Clinician: When you hear the voice, what kinds of things does it say?
Interviewee: He says I'm rotten and damaged and no good to anybody. And he says he's going to hurt me.
C: Is it the voice of someone you know?
I: I don't think so. It reminds me of when my uncle abused me as a child. He used to say things like that to me.
C: Is it your uncle's voice that you are hearing?
I: No. It's definitely not his voice. I would know his voice anywhere. It's someone else's voice. I don't know who.
C: Sometimes when people have memories of bad things that happened in the past, they can see it or hear it, almost like it's happening again. Like a flashback. Is that when you hear this voice? When you have memories about the abuse that happened when you were younger?
I: Sometimes I hear it when I have those memories, but I hear it other times too.
C: When are some other times that you hear it?
I: Anytime I get stressed out. Even if I'm not thinking about what happened.

In this case, the voice does not appear to be solely related to flashbacks of childhood abuse, but is more likely related to a psychotic process that may be associated with schizophrenia and would lead the interviewer to explore whether other symptoms of schizophrenia are present.

9.7.5 Barriers to Gathering Information Critical to Make a Diagnosis

We have found that some symptoms and features specific to schizophrenia can, in some cases, complicate and impede the interview process. Here we briefly discuss some common roadblocks to gathering diagnostic information that we have observed in clinical interviews with individuals with schizophrenia and some sample strategies for overcoming them. These factors often overlap and many of the strategies can be used interchangeably.

Poor insight. Individuals with schizophrenia may lack insight into their mental disorder, which can limit the accuracy of self-report. Although insight is a broad construct with several definitions, current conceptualizations of insight in schizophrenia include the following dimensions: awareness of illness and symptoms, acknowledgement of and compliance with treatment, and ability to make accurate attributions for psychotic experiences (Amador, Strauss, Yale, & Gorman, 1991; David, 1990; McEvoy et al., 1989). Lack of insight has been associated with several variables in schizophrenia populations most notably treatment compliance and outcome (e.g., Lysaker, Bell, Milstein, Bryson, & Beam-Goulet, 1994; Heinrichs, Cohen, & Carpenter, 1985).

Individuals with poor insight may minimize or deny the presence of symptoms and more notably deny the existence of any functional impairment, particularly when presented with close-ended (i.e., yes or no) questions. With some strategic more open-ended questions the interviewer can often gather some of this information indirectly.

Example 1

Clinician: You told me you were hospitalized on a psychiatric unit 2 months ago. While you were there, what did the doctors tell you was wrong?
Interviewee: They said I had schizophrenia.
C: What did they tell you about schizophrenia?
I: That I wasn’t thinking right and that I needed to take medication for it.
C: Has the medication been helpful?
I: Yeah. It makes me calmer and my thoughts don’t get so jumbled up.
C: Not so jumbled up, How so?
I: Well before I had all these ideas and things were just really noisy in my brain. I would hear a song on the radio and hear these extra messages like I could hear all these different frequencies.

Example 2

C: So you said your family was worried about you and took you to the hospital. What kinds of things were they concerned about.

I: They told me I wasn't coming out of my room and that they could hear me yelling when no one was around and acting weird.

C: Acting weird… in what way?

Cognitive impairment. Many individuals with schizophrenia experience some degree of impairment across multiple cognitive domains including attention, memory, problem solving, and processing speed (Heinrichs & Zakzanis, 1998). More generally, these impairments are manifested in a reduction in the efficiency with which individuals process information (Dickinson, Ramsey, & Gold, 2007). Distractibility and inattention may be more pronounced in acute phases of the disorder particularly if individuals are experiencing auditory hallucinations. However, cognitive impairments are relatively stable across the course of schizophrenia and often persist even after an acute episode of psychosis resolves (Hill, Schuepbach, Herbener, Keshavan, & Sweeney, 2004; Rund, 1998). For some individuals the interview may need to be tailored to accommodate these cognitive impairments. To accommodate memory difficulties, particularly when gathering information about lifetime episodes, it is helpful to reference questions to a time frame around a specific incident. For example:

Clinician: You said you were first hospitalized when you were 19, shortly after you were discharged from the army. You said this was in Georgia. Is that correct? I want to ask you some specific questions about how you were feeling right before you went into the hospital.

Attentional difficulties also may make it necessary to take frequent breaks or divide the interview into several brief meetings rather than attempt to complete it in one sitting.

Negative symptoms. For individuals with prominent negative symptoms there is a general diminution in drive or motivation, social affiliation and impoverished thinking all of which can substantially limit the amount of information garnered in the interview. Notably, these symptoms manifest themselves as limited engagement in the interview and poverty of speech (brief unelaborated responses to questions). While in and of themselves these negative symptoms are informative for the diagnosis of schizophrenia, they can substantially limit obtaining other necessary diagnostic information. For example, when evaluating Criterion B with someone with prominent negative symptoms (or marked cognitive impairment) it is helpful to use specific and concretet questions. For example, ask the interviewee to describe a typical day for herself, what time does she get out of bed, and how does she spend her time (e.g., watching TV, working, participating in a day program). This is a concrete line of questioning that can generate necessary information to determine level of functional impairment.

Guarded and suspicious presentation. This is perhaps one of the most challenging barriers to a diagnostic interview. The interviewer will likely notice this presentation early in the interview and can adjust his or her approach accordingly. The obvious challenge is to build the rapport necessary for the interviewee to engage in the interview and share the needed information. There are several reasons why an interviewee may be guarded. In addition to suspiciousness, he may be reluctant to discuss symptoms as a result of embarrassment, a history of negative interactions with treatment providers, or fear of being hospitalized. Making sure there is a careful description of the purpose of the interview and taking some extra time during the overview section may facilitate this rapport. In particular, emphasizing the importance of the interviewee's perspective and the value of his information to the treatment process can help with engagement. The other strategy is to be attentive for symptom information throughout the interview. One will not always obtain all the necessary information during the psychotic module of the SCID. Often, even if an interviewee denies all psychotic symptoms he may provide information during other parts of the interview that, if followed up upon, can reveal additional symptoms. In general, with a person who is guarded or suspicious this can be accomplished by asking more open-ended questions and gently probing for more information where possible, with questions such as "Why might that be?" or "Has this ever been a problem for you?" The task is to encourage the interviewee to explain his experience.

Clinician: Has it ever seemed like people were going out of their way to give you a hard time or trying to hurt you?
Interviewee: No
C: How about at your job? You mentioned earlier you had had troubles with your boss and coworkers.
I: Well yeah….everyone had an agenda against me and they were deceitful and corrupt.
C: Why do you think they singled you out?

In the case of an interviewee denying all symptoms it may be diagnostically informative to gently challenge her with other collateral information gathered from the medical record, other clinician, or family member. For example:

Clinician: So I've asked you about a lot of different symptoms that people sometimes have and it sounds like none of these have been a problem for you. I understand you were hospitalized last month and are now getting treatment here at the clinic. I'm interested in hearing your take on what's been going on.
Interviewee: Well I was locked up by the police and then forced to go to the hospital then the judge said I have take medication.
C: What was going on before you were locked up?
[patient goes on to describe paranoid delusion about being electronically monitored by FBI with surveillance cameras mounted in her home and surrounding community]

As a final caveat, it should not be assumed that one will always encounter these barriers with individuals with schizophrenia. For many individuals, particularly among stable outpatients, rapport can be established relatively quickly and the necessary information for making a diagnosis can be obtained during the interview. Often individuals appreciate the opportunity to explain or discuss their experience with mental illness.

9.8 Dos and Don'ts

Do maintain an empathic and patient approach to the interview. Individuals with schizophrenia often have experienced failure and rejection in many domains of their lives. This may result in a more guarded, reticent, or withdrawn presentation in interview. The interviewer may need to work a bit harder to establish rapport and set the patient at ease. Experiencing positive symptoms of schizophrenia may be distressing and frightening to the patient, and a warm empathic approach can ease this distress and enhance the information gained during the interview. Where possible avoid using jargon and instead use the interviewee's own words to refer to psychotic episodes (e.g., nervous breakdown). Some associated symptoms and cognitive impairment may result in longer latencies and less coherence to an interviewee's responses. A good diagnostic interviewer will tailor the interview to accommodate the interviewee's limitations. A patient and gentle interview style can facilitate engagement in the interview process while helping the interviewer obtain the most accurate information possible. Lastly, depending on the clinical context, a diagnostic interview may represent one of the interviewee's first contacts with the mental health system. Thus the interviewer should attempt to maximize the engagement in treatment by making the interview experience as person-centered and positive as possible.

But, don't turn the interview into a therapy session. While an empathic stance to a diagnostic interview is recommended, it is also important to remember the purpose of the interview. Many novice interviewers have a tendency to respond therapeutically to any sign of distress. This type of response is not always necessary and can make interview process much lengthier and inefficient resulting in a disservice to both interviewee and interviewer. The purpose of the interview is to determine a diagnosis, often to inform a course of treatment. Therefore, throughout the interview an interviewer should be asking herself: how is this statement or question relevant to determining a diagnosis? Of course, there may be occasions where an interviewee is too distressed to participate in a diagnostic interview. An interviewer will need to use clinical judgment as to how and when to respond to distress and ultimately if it is necessary to terminate the interview and reschedule.

And, don't apologize for questions. Novice interviewers may have a tendency to apologize for questions, or qualify questions (e.g., "this next question may be difficult for you to answer"). There also may be a tendency to avoid questions based on the perception that the interviewee will become upset or won't be able to answer. Instead, a matter of fact and direct approach is recommended. Interviewees are often quite open to sharing their experiences, and individuals with schizophrenia are no exception. One should not automatically assume that they will not want to answer or can't handle certain questions. Simultaneously, one should avoid becoming overly fascinated by psychotic phenomena to the detriment of the interview. Again, the purpose of the interview is to obtain information necessary to make a diagnosis.

Do avoid arguing with interviewees about the veracity of their psychotic experience. It is unlikely that an interviewer would openly argue with an interviewee about her delusional beliefs. However, the interviewer should be prepared with a response in the event that he is asked whether or not they agree with an interviewee's beliefs or experiences. Often the interviewer can deflect such questions by making a matter of fact and nonjudgmental statement like: "I haven't had any experiences like that. I'm really just interested in hearing more about what your experiences have been with [psychotic symptom]."

Don't assume a diagnosis of schizophrenia based on one or two symptoms. There is no single symptom that is pathonogmonic to schizophrenia. Auditory hallucinations and delusions can occur in many other disorders or as a result of multiple forms of substance use and withdrawal. Therefore, it is critical to do a thorough assessment to make a fully informed diagnosis. As a strategy, the diagnostic interview can be approached as a series of hypotheses that are refined as the interview progresses. The interviewer should be flexible and seek out information that will either confirm or disprove the hypotheses.

Do anchor questions to specific time periods or events. Many diagnostic criteria are somewhat dependent on an interviewee's ability as a historian. Therefore, wherever possible, questions about symptoms should be anchored around a specific time frame or event. It may require a bit more time up front to determine such a time frame, but it is worthwhile if it can assist the interviewee in accurately recounting symptoms retrospectively. As discussed above, the time course of symptoms is critical to determining a diagnosis of schizophrenia and making a differential diagnosis regarding mood episodes, PTSD and possible substance-related symptoms.

Do obtain training with interviewers who have clinical expertise in schizophrenia. Many of the symptoms of schizophrenia are determined based on behavioral observation. Observing an experienced interviewer complete a diagnostic interview and/or watching videotaped interviews can greatly enhance the novice interviewer's understanding of symptoms of schizophrenia. Additionally, participation in videotape supervision (often the norm for clinical training programs) can substantially improve interviewing skills with this population.

9.9 Summary

In this chapter, we have provided a description of schizophrenia psychopathology, a summary of diagnostic criteria and several interviewing strategies for this sometimes challenging diagnosis. Although schizophrenia is a complex disorder with a variable clinical presentation, we hope that this information can provide a roadmap to the diagnostic interviewing process and highlight potential pitfalls to be avoided. Structured clinical interviews such as the SCID are the gold standard for establishing a diagnosis of schizophrenia. Interview-based symptom assessments such as the BPRS, SANS, SAPS, and PANSS can also be very useful for helping the interviewer determine whether Criterion A (active phase) symptoms of schizophrenia are present. Information from collateral sources as well as standardized assessment of psychosocial functioning can assist in determining if Criterion B (social/occupational dysfunction) is met. A thorough diagnostic interview will also include an assessment of mood symptoms, substance use, medical history, and trauma to differentiate between schizophrenia and other disorders that may include psychotic or psychotic-like symptoms.

Our aspiration has been to provide the reader with informative clinical descriptions and tips to enhance the interviewing process. We encourage clinicians to seek out additional training resources and continue to hone interviewing skills and strategies specific for this population.

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Chapter 10
Personality Disorders

Brian P. O’Connor and Edouard S. St. Pierre

10.1 Descriptions of the Disorders

Personality disorders (PDs) are characteristic, maladaptive patterns of thoughts, feelings, perceptions, and behaviors that begin early and last long. They are displayed in a wide range of situations. They affect many spheres of the individual’s life. They also involve departures from the standards of behavior in the individual’s social–cultural environment. They are often described as extreme and inflexible manifestations of personality characteristics that can be found in normal populations.

The ten heterogeneous PDs in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision (DSM-IV-TR; American Psychiatric Association, 2000) exist in the region between psychological health and illness. Social and occupational functioning may be impaired, but without major distress or loss of contact with reality. People do not suddenly become “ill” with a PD and seek help. Instead, people with PDs feel normal and at home with their conditions. Their disordered personalities and self-concepts are all they know and remember, and they may value the traits in themselves that are problematic for those around them. PDs are “ego-syntonic,” whereas most other DSM-IV-TR disorders are ego-dystonic conditions that feel unfamiliar and undesirable. PDs are more closely tied to cultural expectations than other DSM-IV-TR disorders. Diagnosing PDs requires that judgments of personality deviance be made about persons who often value their maladaptive beliefs and habits. Although persons with PDs may not be distressed by their adjustment difficulties, they are often unhappy and distress can be found in their lives. PDs are often intertwined with academic problems, work problems, family and relationship problems, substance abuse, violence and criminality, suicide,

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mortality, accidents, emergency room visits, child custody battles, and therapy failures, dropouts, and referrals. PDs may affect the course of Axis I disorders and responses to psychological and pharmacological treatments. Individuals with PDs are often reluctant to accept professional help and they tend to blame others for their difficulties (O'Connor & Dyce, 2001).

The ten DSM-IV-TR PDs are grouped into three clusters on the basis of descriptive similarities. Cluster A includes the paranoid, schizoid, and schizotypal PDs, which involve withdrawn, suspicious, odd, or eccentric behavior. Cluster B includes the antisocial, borderline, histrionic, and narcissistic PDs, which involve dramatic, emotional, or erratic behavior, often accompanied by labile and shallow moods and intense interpersonal conflicts. Cluster C includes the avoidant, dependent, and obsessive-compulsive PDs. The DSM-IV-TR also permits clinicians to use the diagnosis of "PD Not Otherwise Specified" for individuals who meet the general diagnostic criteria for PDs, but not the criteria for specific PDs. Interested readers are referred to Kay and Tasman (2006), Livesley (2001), Lowe and Widiger (2008), Maj, Akiskal, Mezzich, and Okasha (2005), Sperry (2003), Widiger and Sanderson (1997), and Yudofsky (2005) for excellent, more detailed descriptions of the individual PDs.

10.1.1 Paranoid PD

The *paranoid* PD involves unjustified suspiciousness and distrust of others, who are perceived as deceitful and malicious. Prototypical signs of cognitive impairment include tendencies to interpret trivial events as having hidden, threatening meanings; to perceive attacks from others when none have been made; to bear grudges; and to be preoccupied with doubts about the loyalty and trustworthiness of friends, coworkers, and relationship partners. Speech is coherent but often based on faulty premises. Individuals with the paranoid PD scrutinize others for sign of threat, find evidence for their concerns, and feel persecuted. They are guarded and have a need to be self-sufficient. They are often concerned with rank and power, experience occupational difficulties, blame others for their problems, become involved in hostile disputes, and may threaten lawsuits. They tend to be secretive and avoid intimacy, self-disclosure, and dependency because they fear vulnerability and exploitation. They have few friends and they eventually distrust their occasional allies. Suspicions about emotional and sexual infidelities result in ongoing arguments, complaints, sarcasm, vigilance, discomfort, and conflict in close relationships.

Differential diagnosis. The paranoid PD differs from schizophrenia in that the delusions are less psychotic and bizarre and there are no hallucinations. Unlike the schizotypal PD, there are no perceptual distortions and behavior is less eccentric. Paranoid PD persons usually do not have the long history of social deviance and motivation to exploit others that is evident in the antisocial PD.

10.1.2 Schizoid PD

Persons with *schizoid* PD are detached and uninterested in social relationships. Their emotional responses to others are inappropriate, flat, or constricted. They consistently prefer solitary activities. There is indifference to praise and criticism and low levels of pleasure in life, including minimal interest in sensory and sexual experiences. Schizoid PD individuals may appear slightly uncomfortable, may give short replies to questions, and may display little eye contact and humor. They are eccentric, aloof, and unaffected by the interests and concerns of others. They appear unable to experience and express emotions, especially anger and aggression. They are oblivious and indifferent to the rewards, punishments, and subtleties of relationships. They are often loners who develop attachments to animals or objects rather than people. Plans they may have for developing relationships are generally not acted upon and opportunities are not pursued. There may be contact with immediate family members, but they usually do not have close friends or confidants and they rarely marry. Schizoid PD persons are passive, indecisive, and they lack ambition. They may succeed at solitary occupations and develop stable, distant relationships in these contexts. There may be interests in fads and intellectual movements, but without social involvement. They are often preoccupied with solitary intellectual activities and gadgets, and their imaginations and fantasy lives may be slightly richer than their actual lives. Thought and speech may be odd, but not incoherent.

Differential diagnosis. Compared with the paranoid PD, persons with schizoid PD tend to have fewer social contacts, less paranoia, and less verbal aggression. Compared to the schizotypal PD, there is an absence of social anxiety, an absence of cognitive-perceptual distortions, and fewer eccentricities. Schizoid PD persons have weaker desires for intimate relationships than do avoidant PD persons and they are more indifferent to others.

10.1.3 Schizotypal PD

The *schizotypal* PD is a mild, schizophrenia-like disorder that involves cognitive and interpersonal deficits. Schizotypal PD persons display odd thinking patterns and they may occasionally have odd vocabularies. They may have ideas of reference, peculiar superstitions, beliefs in magical powers, bizarre fantasies, mystical experiences, and perceptual distortions. They are typically withdrawn, socially unskilled, sensitive to anger, and they typically lack close contacts apart from family members. There is persistent social anxiety that is associated with paranoid thoughts about others and relationship problems. Behavior and appearance may be odd, and emotional expressions are constricted. They rarely date or marry and are at risk for becoming involved in cults. They are absorbed in their own eccentric worlds and tend to lead empty lives.

Differential diagnosis. Compared to schizophrenia, there is no enduring overt psychosis and less deterioration in functioning. Psychotic symptoms may be displayed when stressed, but the cognitive distortions are not severe. There are more cognitive-perceptual distortions and eccentricities than in the avoidant PD and a weaker desire for relationships.

10.1.4 Antisocial PD

The DSM-IV-TR criteria for the *antisocial* PD focus on irresponsible and harmful behaviors. Prototypical features include a consistent disregard for, and violation of, the rights of others and a wide range of criminal-type behaviors such as assault, theft, vandalism, child and spouse abuse, substance abuse, and sadism. Antisocial PD persons lie for personal gain. They are impulsive, irritable, and aggressive. They have little regard for safety; they are inconsistent in their work behavior; they often fail to honor financial and interpersonal commitments; and they rarely experience remorse for their harmful actions. However, they can also be superficially charming and ingratiating. Antisocial PD persons may have relationships but they are typically unable to maintain close, mutually satisfying relationships. Other people are foolish, self-serving, potentially hostile, and are objects to be used and abused. Persons with antisocial PD tend to be egocentric swindlers who rarely feel shame or empathy. Expressions of emotion are not likely to be genuine. Although they are often average or above average in intelligence, there is nevertheless a failure to plan, a disregard for the truth, a lack of insight, and a failure to learn from past mistakes. They are reckless, impulsive, and concerned with immediate gratification. Criminal behaviors may be performed for thrills and not just personal gain.

Differential diagnosis. Antisocial PD persons display more calculated aggression and exploitation and less emotional dependence on others than do borderline PD persons. Compared with the narcissistic PD, antisocial PD persons are more concerned with material gains than with respect and admiration. They are also more reckless and impulsive and have an early history of conduct disorder.

10.1.5 Borderline PD

Persons with *borderline* PD have intense, chaotic relationships; unstable self-concepts; and perceptions of significant others that vary between being extremely positive and extremely negative. There is often potentially self-damaging impulsivity, including substance abuse, promiscuity, overspending, gambling, shop-lifting, and reckless driving, especially during crises. They are preoccupied with feelings of abandonment and emptiness. They have problems controlling their anger, and they may have occasional paranoia and episodes of dissociation. Borderline PD persons often feel bad, evil, and are prone to depression. They form intense attachments, but then become nervous and upset about minor slights. They have great difficulty being alone and want emotional (rather than materialistic) support from others. They are quick to perceive others as cruel persecutors and they become argumentative and sarcastic. They experience frequent rejections and they search for quick fixes for their pain. Self-mutilation and suicidal behavior may occur in response to interpersonal conflicts. They may occasionally seem to improve and get their lives back on track, but they soon fall into further crises.

Differential diagnosis. Compared to mood disorders, the emotional states in borderline PD persons shift more directly in response to interpersonal events, and there is more anger and deliberate self-destructiveness. There is early and chronic seeking of nurturance and greater fears of exploitation than in posttraumatic stress disorder. Borderline persons feel bad or evil and there is more impulsivity and instability in their identities and emotions than in the narcissistic PD. And there is more self-destructiveness, chronic emptiness, a sense of worthlessness, and more enduring feelings of mistreatment than in the histrionic PD.

10.1.6 Histrionic PD

The prototypical features of *histrionic* PD are excessive emotionality and attention-seeking behavior. These persons are uncomfortable when they are not the center of attention and have a strong need for social approval. They are flamboyant in their dress and speech and they are often inappropriately flirtatious. Their emotional responses are shallow, shifting, and exaggerated. They talk primarily about themselves and are concerned with physical appearance. They are excitable and they crave novelty and sensational experiences. They are trusting, but they are also easily frustrated, overly reactive, and they may throw temper tantrums. They readily form new relationships but have difficulties forming lasting attachments. Others may initially form positive impressions of histrionic PD persons, but others eventually perceive them to be shallow and insincere. Histrionic persons become dependent, demanding, manipulative, and needy, and their relationships are not as intimate as they may claim. Although they are not in-depth thinkers, they may do well in positions that require creativity and imagination. Their speech is vague and full of exaggerated descriptions of people and events.

Differential diagnosis. Histrionic PD persons are more flamboyant, emotional, uninhibited, and assertive than are dependent PD persons. Compared with narcissistic PD persons, they are more willing to be perceived as weak or dependent and display greater warmth. They also appear more juvenile and flirtatious.

10.1.7 Narcissistic PD

The *narcissistic* PD involves grandiose self-importance, a strong need for admiration, and a lack of empathy. These individuals believe they are unique, a cut above the masses, and feel entitled to high levels of admiration and special treatment. They envy the accomplishments of others and believe that others are envious of them. They typically have fantasies of unbounded success, beauty, brilliance, or fame and engage in displays of superiority. They exaggerate their accomplishments and extract compliments from others. They may appear self-sufficient, but they are also shallow, attention-seeking, and sensitive to criticism. They often feel empty, even when they are successful. Impression management successes feel hollow, perhaps because they are so strongly sought, and the hollowness soon fuels further efforts to impress. Persons with the narcissistic PD easily become outraged in response to minor slights and rejections and then become preoccupied with revenge. They are sensitive to their own needs and feelings, but oblivious to those of others, who are often treated as objects to be exploited. Relationships are typically strained and they have difficulty remaining in love. They alternate between idealization and contempt for close others, who are considered potentially admiring audiences rather than full human beings. Narcissistic individuals may be motivated to excel in their careers, but they often have troubled relationships with their coworkers.

Differential diagnosis. Compared with the obsessive-compulsive PD, narcissistic PD persons experience less guilt, less self-criticism, less conscientiousness, and are more exhibitionistic.

10.1.8 Avoidant PD

Persons with *avoidant* PD are characterized by social anxiety, inhibition, and feelings of inferiority. They are sensitive to criticism and rejection. Avoidant PD persons may appear self-effacing and eager to please. Internally, they are preoccupied with negative thoughts about assertiveness, criticism, and appearing foolish. They are creatures of habit whose lives are limited by feelings of incompetence and fears of embarrassment. They become involved with others only when they are certain of being liked. The fear of shame and ridicule restrains the development of more intimate relationships and they may be clinging and fearful of losing their few close contacts. Avoidant PD persons are often lonely and bored, with few close contacts apart from family members. They tend to hold marginal jobs and may function adequately if social skills are not required.

Differential diagnosis. Unlike the schizoid PD, avoidant persons desire social contacts but they have difficulty initiating relationships because they are too shy and insecure to seek them out. The social inhibition is more pervasive and chronic in the avoidant PD than it is in social phobia. There are more pervasive difficulties with intimacy, greater social skill deficits, and stronger interpersonal sensitivities.

10.1.9 Dependent PD

The defining feature of *dependent* PD is a strong, pervasive need to be cared for. There are strong fears of separation, and there is submissiveness and clinging behavior. Dependent PD persons have great difficulty asserting themselves, are unwilling to make demands on others, are reluctant to disagree with others, and accommodate to others excessively, all out of a fear of disapproval and loss of support. They seek advice and reassurance from others before making decisions and prefer to have others assume responsibility for most aspects of their lives. They feel anxious and helpless when alone, and they are preoccupied with fears of being left to care for themselves. They can nevertheless be self-sacrificing in their care for others. They seek out relationships despite fears of being rejected. They give priority to the needs of others, who may lose respect, take advantage, and reject them. Intimacy may be adversely affected by the preoccupation with maintaining relationships. Replacements are quickly sought when important relationships end. Dependent PD persons avoid positions of responsibility and become anxious and seek reassurance when placed in leadership positions. Other people are perceived as stronger and more competent than oneself, and they tend to have jobs that involve doing tasks for others.

Differential diagnosis. Dependent PD persons respond to real and imagined interpersonal losses with submission and appeasement, which is in contrast to the rage displayed in the borderline PD.

10.1.10 Obsessive-Compulsive PD

Persons with *obsessive-compulsive* PD are perfectionists who are preoccupied with order and proper behavior. They are concerned with rules, lists, and schedules, even at the expense of efficiency. Work and productivity are more important than friendships and good times, which are likely to be planned. They tend to be overly conscientious, rigid, stubborn, serious, neat, formal, and punctual. They are unwilling to compromise or let themselves be convinced by others. They may procrastinate over small decisions, but other times they may have a hard-driving, do-it-now attitude. They tend to be thinkers with little spontaneity. Their emotions are constricted and they have trouble expressing affection. They may become depressed as they realize the emptiness of their lifelong preoccupation with order, rules, and performance at the expense of enriching leisure activities and relationships. They insist on doing things their own way and are reluctant to delegate. They are often stingy in their spending on both themselves and others. They often marry and often have good careers, but few friends.

Differential diagnosis. Unlike people with obsessive-compulsive disorder (OCD), which is an anxiety disorder on Axis I, these individuals generally do not have obsessions or compulsions and the obsessive-compulsive PD is not a diathesis for OCD. They are excessively conscientious, but not necessarily anxious and nervous. The obsessive-compulsive features are ego-syntonic and not ego-dystonic.

10.2 Procedures for Gathering Information

Diagnosing a PD requires understanding the client's typical modes of thinking and behaving, the quality of their relationships, their emotional responses, and their subjective experiences. No existing assessment method provides all this information.

Assessment data derived from self or informant reports or from written records should be integrated with a PD literature-informed clinical opinion. PDs are, by definition, long-standing and contextually pervasive conditions. A PD diagnosis based on assessment data from a single point in time should be regarded as provisional. A valid, definite diagnosis should be based on data that are longitudinal, cross-situational, and multimodal (Clark, 2007). It takes data and time before a clinician can be confident that someone’s personality patterns are broad, enduring, and dysfunctional.

Data for PD diagnoses can be obtained from several sources, including self-reports, informant reports, written records, and informed clinical judgment. Unfortunately, the levels of diagnostic agreement between these sources are typically only moderate or low (Klonsky, Oltmanns, & Turkheimer, 2002; Meyer et al., 2001; Widiger & Coker, 2002). Diagnoses based on any single source of information, including semistructured interviews, are less accurate than those based on multimodal assessments (Meyer et al., 2001; Perry, 1992). In fact, diagnoses based on single-method interviews have been found to be in error as much as 70% of the time. Each source of information nevertheless has the potential to contribute unique and incrementally important information for PD diagnoses.

10.2.1 Self-Report Methods

Self-report data are commonly used for PD diagnoses and are typically obtained via paper-and-pencil inventories and/or diagnostic interviews. However, even psychometrically sound self-report instruments can have limitations. People are often more willing to disclose positive information rather than negative information about themselves. There may be considerable variation in how respondents interpret questions about personality and distress, and the terminology used in some instruments is unfamiliar to some clients (Ganellen, 2007). Individuals with PDs often lack insight into the maladaptive nature of their personality traits. They may fail to recognize that their own characteristic ways of thinking, behaving, and relating to others contribute to the dysfunction they experience in their lives. They are often quite comfortable with who they are and perceive the people around them as the sources of their troubles. “We’ll get along fine once you realize I am God,” could be the natural operating principle for many narcissists. An individual with obsessive-compulsive PD might accurately describe himself as conscientious, responsible, and productive without recognizing that his unyielding interpersonal style limits or precludes his ability to form bonds with others. He may long for closer ties with others while simultaneously resenting family members and acquaintances. In other words, the self-insight deficiency that is characteristic of people with PDs may reduce the accuracy of their self-reports. The core features of PDs can also reduce the accuracy of self-reports. According to Widiger and Coker (2002), antisocial persons will be dishonest, histrionic persons might exaggerate their symptomatology, dependent persons can be overly self-denigrating, paranoid persons will be reluctant to provide personal information, and narcissistic persons might deny the existence of faults and inadequacies. Despite the limitations, self-report data should not be dismissed but rather viewed as one source of information in a multimodal assessment of PDs.

10.2.1.1 Self-Report Inventories

Self-report inventories have the potential to quantify the entire landscape of PD criteria in a time-efficient manner. Modern inventories often have scoring software that further increases efficiency and diagnostic utility by automatically comparing a client's profile to a variety of established diagnostic profiles. The wide content coverage of self-report inventories increases the probability that clinicians will be alerted to specific symptoms or diagnoses that they had not previously considered. Some PD inventories also have measures of Axis I disorders, which is useful given the high comorbidity between Axis I disorders and PDs, and because of the importance of comorbidity to treatment planning. Many self-report inventories also include validity scales that can alert clinicians to response sets, biases, and distortions that might compromise the validity of PD assessments. Further information on popular, recommended self-report inventories is provided in Sect. 10.4.

A drawback with self-report inventories is that they have been found to err in the direction of false-positive diagnoses (Clark & Harrison, 2001; Widiger & Coker, 2002). Furthermore, measures of Axis II traits are sometimes contaminated by comorbid Axis I states. Self-report inventories should thus be considered suggestive screening tools and used as only one part of a multimodal assessment. PD diagnoses indicated by a self-report inventory should be considered conditional until they are corroborated by other assessment data.

10.2.1.2 Clinical Interviews

Clinical interviews range in format from unstructured to semistructured to structured. Unstructured interviews are the most common method of diagnosing PDs. They are relatively time efficient and easy to conduct. The questions are usually general and open-ended and thus provide a useful method of assessing a client's perceptions of their day-to-day functioning and relationships. However, unstructured clinical interviews often fail to cover the full range of diagnostic criteria for PDs, resulting in missed diagnoses (Blashfield & Herkov, 1996). The information obtained from unstructured interviews is often open to varying interpretations and to clinician biases. Clinicians may inadvertently seek and attend to information that confirms their theories and hunches about a client while simultaneously ignoring evidence that disconfirms their expectations.

Structured interviews provide more systematic and complete coverage of the many diagnostic criteria for PDs. Semistructured interviews involve a series of scripted direct questions but they also permit additional open-ended questions and follow-up inquiries to the responses that are provided to the scripted questions. Observations of the client's manner of responding and relating to the interviewer may also be considered in diagnostic decision making. The resulting diagnoses are based on considerations of both the patient's replies to questions and on the interviewer's impressions of the client's presentation during the interview. Further information on recommended structured clinical interviews for PDs is provided later in this chapter.

10.2.2 Informant Data

It is helpful to supplement self-report data with information from knowledgeable informants such as family members, friends, or coworkers. These persons may be more aware of, and more willing to discuss, unflattering behavioral traits that might be censored from client self-reports. Arrogance, dishonesty, dependency, and tendencies to self-harm, and behave aggressively or impulsively are important PD traits that may not figure prominently in self-reports. Collecting data from informants is typically ethical and legal only if clients provide the clinician with their permission to do so. Many of the questions asked of clients can also be asked of informants about clients. Informants can be asked to elaborate on the information provided by clients, other informants, or on client behaviors that have caught the clinician's attention. Informants may also be more aware of how long a client has demonstrated a particular maladaptive personality trait.

The greater willingness of informants, as opposed to clients, to report on client maladaptive behavior could at least partially explain the modest levels of agreement typically found between the two sources of information (Klonsky et al., 2002; Ready, Watson, & Clark, 2002). However, information from informants is not always more accurate than self-reports. The modest levels of self-informant agreement are partially due to the fact that informant information is less reliable when it pertains to covert internal processes such as patterns of thinking and emotional reactions. Informant data is more valid when it focuses on overt, easily observed behaviors such as aggression or dependency (Ready, Watson, & Clark, 2002).

Despite their modest agreement with client self-reports, informant reports have been found to contribute incrementally to the prediction of PDs (Clifton, Turkheimer, & Oltmanns, 2005; Klein, 2003; Ready, Watson, & Clark, 2002). In one study, 20% of initial decisions about the presence or type of PD were changed after additional information from an informant was obtained (Zimmerman, Pfohl, Stangl, & Corenthal, 1986). The changes in diagnosis usually occurred because the informants provided information concerning pathology that was not reported by the clients.

The literature is presently unclear on whether data provided by clients should be weighted more heavily than data provided from their informants or whether one kind of informant data is more reliable than other kinds of informant data (e.g., family vs. friends; Clark, 2007). Clinicians should assess the validity of the available information on a case-by-case basis. When information is available from multiple informants, one might naturally rely more heavily on the information provided by the informant who knows the client best. Disagreement between informants might be due to each informant having a very different relationship with the client or a relationship in different contexts. Problematic behaviors or ways of thinking might be more evident to some informants simply because of the relevant contexts and dynamics of their relationships. An informant's own mental health problems can also skew their reports or perceptions of the client about whom they are reporting. Convergences between informants, and between informant and self-reports, likely represent behaviors that are especially salient, inflexible, contextually pervasive, and enduring and are possibly indicative of PDs.

10.2.3 Written Records

Historical file reviews represent a combination of prior clinical opinion and objective data. Criminal, education, health records, and prior psychological assessments, all have the potential to contribute relevant information for PD diagnoses. There is also evidence that personality traits can be rated from records as reliably as from interviews (Tyrer et al., 2007). Written records can provide data on the temporal stability and pervasiveness of the individual's problems and help to rule out comorbid Axis I disorders. Recorded data that go back many years can provide rare, valuable longitudinal information for PD assessments. In short, written records provide one more piece of incrementally useful information for multimodal PD assessments.

10.2.4 Clinical Opinion

When first meeting a client, let them talk. Let the client describe and elaborate on the problems in his or her life. Pay attention to the emotions, thoughts, and motivational tendencies the client evokes in you. A client might annoy you within a few minutes because they seek excessive reassurance, because they dominate the conversation, or because they harshly complain about everything and everyone in their life, including possibly their former therapist. When clients quickly evoke strong, distinct covert reactions in therapists, then one can imagine the impact they must have on the people with whom they spend a lot of time. The first few minutes of interaction can thus be used to form tentative hypotheses about a client. The tentative hypotheses should be promptly discarded when conflicting evidence emerges.

After the initial brief period of building rapport and developing tentative diagnostic hypotheses, further unstructured or unfocused clinical interactions are of little diagnostic value. Clinicians should place most of their confidence in the aggregated and converging evidence from formal assessments. All contacts with the client are nevertheless subject to clinical interpretation and may contribute to the evolving diagnosis. Clinicians should be vigilant for inconsistencies in the client's stories and for leakages of information that provides further insight into the client's personality.

10.2.5 The Complete Assessment

Multimodal assessment is the best method of diagnosing PDs. A good first step is to meet the client for an unstructured discussion. In that meeting, the clinician establishes rapport, hears the client's story in his or her own words, and assesses the client's motivation for assessment and treatment. Some clients might refuse to have informants contacted or will not permit the clinician access to written records. Some clients may refuse formal assessments altogether and the clinician will be left with only their limited clinical opinion. In such cases, a formal diagnosis of a PD is impossible.

When the client is motivated to proceed with a proper assessment, a good next step is the completion of one or more self-report inventories and a semistructured diagnostic interview. It is best to examine the results of self-report inventories only after the formal interview has been completed and analyzed. That way, the clinician can form hypotheses based on the client's verbal and nonverbal behavior during the formal interview and will remain unbiased by any expectations that could be generated from the inventory results. The self-report inventory results are most useful after the interview, especially for supporting or disconfirming the clinician's working hypotheses. Other data sources should be examined whenever possible. Informants should be contacted by phone or met in person and written records should be obtained and examined. The convergence of broad and quality data with literature-informed clinical opinion results in the most accurate PD diagnoses.

10.3 Case Illustrations

10.3.1 Paranoid PD

Kevin was a 42-year-old electrician referred for therapy by his supervisor. During the 3 weeks leading up to therapy, Kevin had refused to speak to any of his coworkers and he told the therapist that they were conspiring to ruin his reputation at work and get him fired. He reported never having trusted or liked any of his coworkers in his 2 years with the company. Kevin was convinced that his supervisor's request that he seek therapy was really just "a way to cover his butt" before firing him. He refused to open up to the therapist because he was sure that the information he disclosed would get back to his supervisor. "I hold my cards pretty close to my chest, people have screwed me over before and I never forget. Even though you say this session is confidential, I know that nothing is ever confidential." Kevin felt that his meetings with the therapist were a waste of time because he had seen his supervisor talking to the district manager and he was sure they were discussing his termination.

10.3.2 Schizoid PD

Alex was a 24-year-old only-child who had never lived away from home. As a high school student he achieved average grades and he never participated in sports or other extracurricular activities. His father and mother separated when he was 18 years old and he had spoken to his father only a few times since then. He was referred to therapy by his mother, whose basement he lived in. She worried that he might be depressed because he never left the house, never had visitors, and spent all his time "sitting in front of that darn computer." She wanted him to either go to college or get a job. He was not mad that his mother had insisted he see a therapist but he denied being depressed, saying only that he had no desire to work and really did not know what kind of work he would want to do anyway. He was not dismayed about being a "loner" stating that he preferred to be left alone to read or play video games.

10.3.3 Schizotypal PD

Debbie, a single 29-year old, had her first contact with a mental health professional when she was arrested for shop-lifting and ordered by the court to undergo a psychological evaluation. She had no prior criminal record or psychotic episodes. During interviews, Debbie smiled broadly and sat on the chair with her legs crossed under her. She expressed no concern about her legal situation and incarceration. She explained, while smiling, "I guess I was meant to be in here for some reason." She described herself as being incredibly "in-tune with energy fields." She said she had always been able to see colors around people and that she could tell who was sick and who was healthy based on those colors. She had earlier been to a friend's funeral on the day she was arrested for shoplifting. After the funeral, while in a department store, she noticed a red candle that she knew was "special" because of how it was placed on the rack, a lone red candle amongst many blue and white ones. She just knew that the candle represented her friend's soul because the outfit in which her deceased friend had been dressed at the funeral was also red. Thus, she took the red candle to "protect it."

10.3.4 Antisocial PD

Dave was a 32-year-old with an extensive criminal record dating back to his early teen years. His record included charges for rape, theft, and physical assault. He had been court-ordered into therapy several times but in each case he told the therapist that he was merely showing up to "get it over with." His longest term of employment was 14 months with a construction company, a job he got with help from a former parole officer. He was fired from the construction job after it was discovered that he was stealing company gasoline for his own vehicle. In his final words to the owner of the company Dave said, "Who cares if I stole some gas? You're rich anyway." Dave had no close friends, only some "drinking buddies." He had never been married but did live with a woman for 6 months and then left her after she became pregnant. He had never met his child and did not know if it was a girl or a boy.

10.3.5 Borderline PD

Tara had her first contact with a mental health professional at the age of 16. Her mother had brought her to hospital following a 3-hour ordeal during which Tara had barricaded herself in the washroom, screamed profanities, and threatened to "slash her wrists." When she finally opened the door to the bathroom, her mother discovered that Tara had purposefully scalded herself on both arms with hot water and that she was unresponsive, "just staring into space." Tara later admitted that the episode was sparked by a break-up between her and a boy she had been dating for 3 months. As she told her therapist at the time, "It was like I panicked when he said he didn't want to be with me anymore." Since that initial episode Tara attempted suicide on at least ten occasions and habitually burns herself with hot water. She has been admitted to a psychiatric unit seven times, with two of those admissions lasting 5 months. She has had many short-term boyfriends and has no close friends. Her most recent admission to hospital was at the age of 27 and was set off by a fight with a boyfriend with whom she was "madly in love."

10.3.6 Histrionic PD

Derek was an athletic and handsome 34-year-old car salesman who referred himself to therapy because he was lonely. He called a female therapist because, as he described, "I get along so much better with women." He arrived for the appointment wearing a tight T-shirt and smelling heavily of cologne. He fiddled with the gold watch he was wearing, as if to draw attention to it. He explained how he was primarily lonely because he had not "found that special woman," his "soul mate." He speculated that perhaps women just did not find him sexy. He became visibly upset as he described the "incredibly dark despair" of his loneliness, and at one point even motioned as if to wipe tears from his eyes, yet none were evident. When asked if he had ever had a serious and loving relationship with a woman, he was suddenly animated. He moved to the edge of his seat and said, "Sure I've dated lots of women. I meet them at dance clubs. They love how outgoing and athletic I am."

10.3.7 Narcissistic PD

Bruce, 53-years-old, arrived at therapy insisting that before anything else he should introduce himself "properly" so that the therapist would be able to understand his "complex issues." He explained that he was a distinguished professor of mathematics at a nearby university. He had published only a few papers but they were exceptionally brilliant. He felt that his work was "ahead of its time" and for that reason his publications had gone unnoticed. He was disappointed and preoccupied with the fact that his colleagues had not properly recognized his genius. He was angry that a fellow professor had recently been given an international award for what was, in Bruce's opinion, just a "shoddy reinterpretation of some old theories." However, what most troubled Bruce and what brought him to therapy was the recent dissolution of his third marriage. He was angry that his wife left him after he had a "brief and meaningless" affair. He felt that in his position and with the stress he was under that she should have forgiven such a "small" transgression. He explained how her leaving made him feel alone and miserable.

10.3.8 Avoidant PD

Tina was a single, 42-year-old insurance office clerk. She had been working for the same firm for 20 years and was comfortable in her role as a clerk. Her work performance was good and over the years Tina had turned down several promotions that promised more money but also more responsibility. She privately wanted a promotion but was terrified that she would eventually make an embarrassing mistake and be the "laughing stock of the office." She considered herself boring and did not like to socialize because she was worried that she would say something stupid and embarrass herself. In the 20 years she worked for the firm, she had attended the annual Christmas party only once, after her boss had repeatedly encouraged her to go. At the party she felt underdressed and was positive she had seen some of the other ladies mocking her outfit. After Tina's long-time boss retired and the new manager announced that Tina was to be supervisor in a newly formed department, she had a series of panic attacks. Tina's sister promptly encouraged her to seek therapy.

10.3.9 Dependent PD

Stephanie, 26-year-old, was referred to therapy by her husband Jeff. He described Stephanie's inability to make decisions, her frequent calls to him at work each day to ask advice, and how she would get upset if he forgot to say he loved her before hanging-up. Jeff admitted that when they first started dating, and for a while after they were married, he thought Stephanie's tendencies were "adorable." But he was now exasperated. Stephanie refused to attend the first therapy session alone, concerned that she would not know how to explain herself to the therapist. With each question, Stephanie looked to Jeff who would encourage her to answer. Stephanie agreed with Jeff's descriptions, adding that she could not "help herself."

She explained that she worried about doing things alone because she was not very smart. She described how she felt anxious when Jeff was not at home and how she would ruminate about her possible ill fates in the event that something was to happen to him. She said that when Jeff's job took him out of town for a night, she would beg her sister to stay with her because she hated being alone. Her biggest concern at the commencement of therapy was that Jeff, despite all his loving reassurances, was going to divorce her because she was "driving him crazy."

10.3.10 Obsessive-Compulsive PD

Doug was an elementary school teacher. He would typically spend 5 hours each night preparing his lesson plans for the next day. Since he "had" to spend time with his wife and their newborn baby, and "had" to walk the dog each night, he often was not able to begin his prep until 9 pm, which meant he would not get to bed until about 2 am. Doug admitted that he agonized over his nightly preparations. He constantly tried to ensure that the reading materials or math problems he had chosen, or the assignments he had devised for his students, were perfect. In the mornings, he would be up early so that he could arrive at the school and write that days' schedule on the blackboard before his class arrived. He had frequent clashes with colleagues and the schools administration whenever he was required to change his lesson plans. At home, Doug was annoyed at how much money he had to spend on items for the baby. He would insist that they check the local thrift shops before buying anything new. Eventually, Doug took stress leave from his teaching position and sought therapy because he was "burned-out" and depressed.

10.4 Recommendations for Formal Assessment

The recommended multimodal assessment approach that was described earlier includes gathering data from semistructured interviews and from self-report instruments that were specifically designed to assist in the diagnosis of PDs. Data from these sources would normally be collected after the initial get-acquainted sessions with the client. In this section, we review the primary self-report instruments for PDs. The subsequent section of this chapter describes semistructured interview methods. The recommended strategy is to combine the results of an interview-based assessment with those from one or more self-report inventories. It is also recommended that client scores on self-report inventories be examined only after the initial and semistructured interviews have been completed.

Some comprehensive semistructured interview and self-report inventory methods are diagnostically based. That is, they provide scores on all PDs, they typically have cut-points for PD diagnoses and they may involve questions that are directly or indirectly based on the DSM-IV-TR diagnostic criteria. Diagnostically based interviews and self-report measures address the same content. The differences reside in their formats, scoring procedures, and breadth of coverage. Diagnostically based self-report inventories sometimes assess a wide range of clinical issues in addition to PDs that are important to treatment planning, such as Axis I disorders.

In contrast with diagnostically based methods are "trait-based" interview, self-report methods that focus on (a) individual PDs (e.g., borderline, narcissism, psychopathy), (b) on non-DSM-IV-TR forms of personality dysfunction that are presumably relevant to PDs, or (c) on normal personality traits that are relevant to PDs. Our discussion focuses primarily on comprehensive diagnostically based methods. Broader reviews of both diagnostically based and trait-based measures were provided by Clark and Harrison (2001) and by Kaye and Shea (2000).

The *Millon Clinical Multiaxial Inventory-III* (MCMI-III; Millon, Davis, & Millon, 1997) is a 175 item true–false self-report measure that assesses the full spectrum of DSM-IV-TR PDs as well as ten clinical syndromes (e.g., mood disorders, anxiety, substance dependence). The MCMI-III requires 20–30 min to complete and was designed for use with adults 18 years and older who have at least a grade eight reading level. The MCMI-III computer program permits the manual entry of paper-and-pencil responses, but it can also administer the test and it generates a graphical profile and interpretive report. The interpretive report provides a list of possible DSM-IV-TR diagnoses and recommendations for treatment. "An important feature that distinguishes the MCMI from other inventories is its use of actuarial base rate data rather than normalized standard score transformations" to determine cut-points for PDs (Millon et al., 1997, p. 5). However, the base rates have not been adjusted for changes in the prevalence of PDs across different settings and the MCMI-III cutoff points overestimate the extent and breadth of psychopathology (Widiger & Coker, 2002).

The *Personality Assessment Inventory* (PAI; Morey, 1991) was designed to screen for psychopathology and to provide information relevant to clinical diagnosis and treatment planning. It is a 344 item self-report inventory in which each item is answered on a four-point Likert scale with the options of "Totally False," "Slightly True," "Mainly True," and "Very True." The PAI requires 40–50 min to complete and it has 22 nonoverlapping full scales, including four validity scales, 11 clinical scales, five treatment consideration scales, and two interpersonal scales. The PAI was standardized for the assessment of people 18 years and older and requires at least a fourth-grade reading level. There are specific scales for only two of the ten DSM-IV-TR PDs, Borderline and Antisocial. However, Morey (1996) described how the examination of specific PAI indicators can assist in the diagnosis of each of the ten DSM-IV-TR PDs. The PAI computer program allows the manual entry of paper-and-pencil responses, but it can also administer the PAI and it generates a graphical profile and an interpretive report. The interpretive report provides a verbal descriptive interpretation of the respondent's profile, DSM-IV-TR diagnostic considerations (including PDs), rule-outs, various supplemental clinical indices, and a statement about the probable validity of the report.

The *Personality Diagnostic Questionnaire-4* (PDQ-4; Hyler, 1994) consists of 99 items that focus directly on each of the DSM-IV-TR PD diagnostic criteria. It is the most frequently used self-report inventory measure of PDs. A drawback is that most of the diagnostic criteria are assessed by just one item. Furthermore, some items are overly direct queries about a diagnostic criterion (e.g., "Lying comes easily to me and I often do it"), and other items are too broad and too indirectly related to PDs (e.g., "I am a very moody person").

10.4.1 A General Trait-Based Measure

There is growing evidence that PDs are dimensional rather than categorical, and that PDs belong in the same dimensional universe as normal personality traits. These findings are also consistent with the description of PDs as rigid, extreme, and maladaptive versions of normal personality traits. There have consequently been strong calls in the literature for clinicians to discover where their clients stand on the most basic and important dimensions of personality (Widiger, Simonsen, Sirovatka, & Regier, 2006). A switch to a dimensional model of PDs is currently being considered for the DSM-V and so it is important to mention the most prominent, comprehensive measure of normal personality traits in the present review.

The *Revised NEO Personality Inventory* (NEO-PI-R; Costa & McCrae, 1992) is a multitrait self-report inventory with 240 items. It is designed for people aged 17 years and older. It can be completed in 35–45 min and it has a minimum required grade six reading level. The NEO-PI-R provides scores for respondents on five upper-level domains: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. It also provides scores for six lower-level facet scales for each of the five domains. There is also an informant version of the NEO-PI-R with items written in the third person for peer, spouse, or expert ratings. The informant version can be used as an alternative measure or as a supplement to the client's self-report. The NEO-PI-R computer program permits the manual entry of paper-and-pencil responses, but it can also administer the test and it generates a graphical profile and interpretive report. The software can also generate an interpretive report that contrasts an informant report with a self-report. The interpretive report includes validity indexes, an interpretation of the client's scores on the upper-level domains and lower-level facets, and clinical hypotheses regarding Axis II Disorders and treatment implications. Widiger and Simonsen (2005) provided a review of the literature on associations between PDs and the NEO-PI-R domain and facet scales. There is also a *Structured Interview for the Five-Factor Model of Personality* (Trull & Widiger, 1997) that is closely modeled on the NEO-PI-R.

10.5 Standardized Interview Formats

Five, well-developed semistructured interviews for PDs are currently available (1) the *Structured Clinical Interview for DSM-IV Axis II Personality Disorders* (SCID-II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997); (2) the *Structured*

Interview for DSM-IV Personality Disorders (SIDP-IV; Pfohl, Blum, & Zimmerman, 1997); (3) the *Personality Disorder Interview-IV* (PDI-IV; Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995); (4) the *Diagnostic Interview for Personality Disorders* (DIPD; Zanarini, Frankenburg, Chauncey, & Gunderson, 1987); and (5) the *International Personality Disorder Examination* (IPDE; Loranger, 1999). All five interview methods are closely based on DSM-IV diagnostic criteria and most have training videos. The SIDP-IV, SCID-II, and IPDE have received more extensive empirical testing and support than the DIPD or PDI-IV. The PDI-IV has the most detailed manual, especially in comparison with the manuals for the SIDP-IV and SCID-II. The IPDE has the largest number of required and recommended inquiries per diagnostic criterion. Unfortunately, the levels of convergent validity for these five most prominent interview methods are modest. Recent reviews of these and of other interview methods were provided by Clark and Harrison (2001) and by Widiger and Coker (2002).

The *Structured Clinical Interview for DSM-IV Axis II Personality Disorders* is widely used and will now be described for illustrative purposes. The interview requires less than 60 min to complete and consists of 119 questions phrased to match the established PD diagnostic criteria. The client's explicit responses and nonverbal behavior inform the clinician's judgment in rating the client on each criterion. A client's endorsement of a criterion might be overridden by the clinician if further verbal inquiry or the client's behavior do not indicate that the trait in question is sufficiently extreme, enduring (stable over time), or pervasive (apparent across contexts). The SCID-II has an optional self-report screening questionnaire that can shorten the interview because the clinician can choose to skip the investigation of those PDs for which the client denied all or most symptoms. The utility of the SCID-II as a diagnostic tool is dependent at least partly on interviewer training, with the diagnostic decisions of highly trained interviewers being more reliable.

10.6 Impact of Race, Culture, Diversity, and Age

Personality and personality pathology are both undoubtedly influenced by social and cultural contexts. Indeed, PD diagnoses are based on clinicians judging that a client's traits are nonnormative and problematic for the individual's social context. It is therefore unfortunate that most of the existing data on PDs has been derived from relatively narrow North American and European samples. Our knowledge of the impact of race, culture, and others sources of diversity on PD phenomena remains limited. There are nevertheless indications of cultural differences in the conceptualization of PDs and in the prevalence of PDs (Paris, 1996). The issue is important because clinicians are increasingly required to attend to complex mental health and PD issues in migrants, traumatized refugees, and in people from diverse cultural contexts. Calliess, Sieberer, Machleidt, and Ziegenbein (2008) as well as Alarcón (2005) describe how clinicians must be knowledgeable and sensitive to cultural and migration issues when diagnosing PDs.

Epidemiological studies indicate that between 10 and 13% of persons in the general population meet the criteria for a PD at any given time. The rates are slightly higher in urban populations and in lower socioeconomic groups. In clinical samples, between one-half and two-thirds of inpatients and outpatients meet the criteria for at least one PD. The most commonly diagnosed PD is borderline, followed by the histrionic, schizotypal, and dependent PDs. Higher concentrations of individuals with particular PDs are found in particular segments of society. The paranoid PD is more common among prisoners, older adults, hearing impaired people, refugees and immigrants, and delusional disorder patients. The borderline PD is more common among people seeking help for substance-abuse, eating disorders, and mood disorders. The avoidant PD is more readily found among people seeking help for anxiety disorders. The dependent PD is found among those seeking help for mood disorders and relationship counseling. High concentrations of the antisocial PD occur in forensic populations. The obsessive-compulsive PD occurs in more common among first-borns and in professions that require perseverance and attention to detail.

The literature on sex differences in PD diagnoses is more extensive and consistent (Morey, Alexander, & Boggs, 2005). Men receive more diagnoses of the antisocial, paranoid, schizoid, schizotypal, narcissistic, and obsessive-compulsive PDs. Women receive more diagnoses of the borderline, histrionic, and dependent PDs. These sex differences have at least a rough correspondence with traditional masculine and feminine sex-role orientations and are thus consistent with the claim that PDs are maladaptively extreme manifestations of normal personality traits. However, there is concern with the relatively high rates at which females are diagnosed with the borderline, histrionic, and dependent PDs (the sex ratio in these diagnoses is approximately 3:1; see Widiger, 1998). It is not known whether men and women vary in how susceptible they are to these PDs, or whether clinicians merely perceive their male and female patients differently. Gender and cultural biases are more likely to occur when clinicians use idiosyncratic and subjective interviewing techniques (Garb, 1997; Widiger, 1998). Regarding aging and PDs, Segal, Coolidge, and Rosowsky (2006) have recently provided an extensive discussion of the impact of aging on the presentation of PDs, problems with the diagnostic criteria for PDs in the late life context, and a theorized pattern for each of the PDs in later life.

10.7 Information Critical To Make a Diagnosis

Prior to the formal diagnosis of a PD, clinicians should check their assessment data for consistency with the diagnostic criteria common to all of the PDs (see the DSM-IV-TR, p. 689, for the general diagnostic criteria for a PD). The diagnosis of a specific PD (e.g., borderline, avoidant, schizotypal) should be viewed as secondary to the initial determination of whether the diagnosis of *any* PD is warranted. Categorizing the client as suffering from a particular PD is often only for convenience.

Doing so might facilitate communication of the diagnosis to the client or to other clinicians. However, the diagnosis of specific PDs is often problematic and not particularly informative because there are excessively high levels of diagnostic comorbidity between many PDs and because there is considerable heterogeneity in the personality characteristics of persons who meet the criteria for individual PDs [see Trull & Widiger (1997), for a review]. These findings have led many to question the value of specific PD diagnoses. These problems also at least partially account for the fact that "PD Not Otherwise Specified" is the most common PD diagnosis in everyday clinical work.

We now present a list of issues that are critical in making a general diagnosis of a PD. A "no" answer to any of the following seven questions should raise serious doubts about the appropriateness of a PD diagnosis.

1. Does the client's typical pattern of thinking and behaving deviate significantly from what is normal and expected in their culture of origin? The expression of a religious practice, habit, or custom that is consistent with the normal practice of the client's culture of origin should not be regarded as evidence for the presence of a PD.
2. Does the client present with dysfunction in at least two of the following four domains:

   Cognition. Does the client present with atypical ways of perceiving and interpreting the self, other people, and events? For example, individuals with paranoid PD often infer hostility, threats, and deceit in behaviors or events that other people consider innocuous.
   Affectivity. Is the client's emotional expression, in any sense, extreme. For example, an individual with a schizoid PD may not appear to have any emotions. The person may be consistently emotionally distant, unresponsive, detached, and indifferent to praise or criticism from others. The person is extreme in their absence of emotional reactions. On the other hand, someone with borderline PD is likely to be emotionally unstable and to have episodes of intense irritability, anxiety, depression, and even dissociation.
   Interpersonal functioning. Does the client's typical pattern of thinking and behaving hinder their ability to participate in adaptive and rewarding interpersonal relationships? For example, arrogance, exploitative tendencies, and the lack of empathy demonstrated by narcissistic individuals often limit their ability to form lasting and rewarding relationships.
   Impulse control. Is the client deficient in their ability to control their impulses? For example, the impulsive behavior of persons with the antisocial PD results in a frequent disregard for the safety of themselves or others and a failure to foresee the negative consequences of their behaviors.

3. Is the client's typical pattern of thinking and behaving inflexible and pervasive? In other words, does the client behave in the same inappropriate ways regardless of where they are or whom they are with? For example, the excessive need for nurturance, support, and reassurance typical of people with a dependent PD is

not limited to only one relationship (e.g., their marital relationship) but instead typifies many of their relationships.

4. Does the client's typical pattern of thinking and behaving result in clinically significant distress or impairment in social, occupational, or other important areas of functioning? People with a PD experience a disproportionally high rate of negative life events, including academic failure, divorce, substance abuse, violence, incarceration, job termination, problematic relationships, suicide, hospitalizations, and Axis I diagnoses. Consequently, they often report significant levels of subjective distress. But because they lack insight into the dysfunctional nature of their personality, they often incorrectly attribute their ills to external causes such as other people (e.g., "my stupid coworkers") and adverse circumstances (e.g., "my job is stressful"). Nevertheless, a more objective assessment of dysfunction can often be made from the results of self-report inventories, reviews of written records (e.g., criminal and hospital records), and informant reports. If an individual's behavior does not evidently result in significant distress or functional impairment, then it should not be considered evidence of a PD no matter how peculiar it may otherwise seem.
5. Has the manifestation of another mental disorder been ruled out as a possible explanation for the client's pattern of thinking and behaving? The comorbidity levels between PDs and Axis I disorders are high. Consequently, only those maladaptive patterns that can be verified as having existed prior to, or in the absence of, an acute Axis I disorder should be considered evidence of a PD.
6. Has the possibility that the client's pattern of thinking and behaving could be due to the direct physiological effects of a substance (e.g., a drug of abuse, a prescribed medication) or a general medical condition (e.g., a dementia, a brain tumor) been ruled out?
7. Is there evidence that the client's pattern of thinking and behaving existed and has been stable since adolescence or young adulthood? Establishing an early onset and stable presentation is helpful in differentiating Axis I states, drug effects, and the effects of a general medical condition from longstanding maladaptive personality traits.

10.8 Dos and Don'ts

Do be sure to consider multiple sources of information (e.g., self-report inventories, formal and informal interviews, informant reports, written reports, and clinical opinion). A valid and reliable diagnosis of PD requires a multimodal assessment. A PD diagnosis made on a single source of information should be considered provisional.

Do form hypotheses about the client. Form and test hypotheses about the client and potential diagnoses at all stages of the assessment. Initially they will be "hunches" based only on interpersonal contact with the client. As the assessment proceeds and more information becomes available, confidence in the working hypotheses and in the ability to make a diagnosis will increase.

Do establish that the individual's dysfunctional traits have endured since at least early adulthood and that they are stable over time. Establishing the enduring and stable presence of the symptoms reduces the possibility that the clients presentation can be attributed to an Axis I diagnosis.

Do consider cultural differences. The client's pattern of behavior must deviate significantly from behavior that is acceptable in their culture.

Do objectively establish that the person's behavior results in significant distress or impairment, regardless of whether the client actually recognizes their personality as the cause. Individuals with PDs often lack insight into the fact that their own characteristic patterns of behaving, thinking, and relating to others contribute to the distress and dysfunction they experience in their lives.

Do establish that the client's dysfunctional tendencies are inflexible, pervasive, and thus occur in a variety of contexts and with a variety of people.

Don't be too proud to discard hunches and working hypotheses. Instead, make efforts to prove them wrong.

Don't fail to consider differential diagnoses. Many of the diagnostic criteria for the individual PDs are also characteristic of Axis I mental disorders. If a maladaptive trait is determined to be present exclusively during an episode of an Axis I disorder, it should not be considered indicative of a PD.

Don't assess or diagnose a PD while a client is in the midst of an acute Axis I disorder episode.

Don't assume that past diagnoses are correct. Verify past diagnoses either by completing your own updated multimodal assessment or by reviewing and validating the data used to establish the previous diagnosis. In most cases, simply regard a past diagnosis to be one piece of information in your multimodal assessment.

Don't diagnose if the evidence for a PD is unreliable or scant. Sometimes the best diagnosis is no diagnosis.

Don't diagnose a PD based on a client's behavior in only one setting. Be careful not to neglect the impact of the client's environment on their behavior. Novel or idiosyncratic environments (e.g., prisons, hospitals, new culture) can evoke seemingly maladaptive behavior and a diagnosis of adjustment disorder may be warranted.

Don't speculate. If you are unsure about the meaning or reliability of a piece of information, then confirm it with the client or an informant. If it cannot be confirmed, then ignore it.

Don't fail to consider the potential effects of low intellectual ability or dementia and acquired brain injuries on personality functioning.

10.9 Summary

The ten heterogeneous, categorical PDs in the DSM-IV-TR are maladaptive, rigid, extreme, pervasive, and chronic manifestations otherwise normal personality traits. Individuals with PDs often value their peculiarities and lack insight into how their social and occupational difficulties are self-generated. PDs must be evident by adolescence or young adulthood for a diagnosis to be made. Diagnosing PDs can be challenging because extensive information about broad patterns is required, because PDs must be differentiated from situational crises and other disorders and because PDs are typically not part of presenting complaints. A multimodal assessment approach was recommended that includes gathering data from semistructured interviews and from self-report instruments that were specifically designed to assist in the diagnosis of PDs. Data should be obtained from additional sources whenever possible, including informant reports and written records. PD diagnoses are based on clinicians judging that a client's traits are nonnormative and problematic for the individual's social context. Clinicians must therefore be knowledgeable and sensitive to cultural issues when diagnosing PDs. Gender and cultural biases are more likely to occur when clinicians use idiosyncratic and subjective interviewing techniques. In Sects. 10.7 and 10.8, we presented a list of issues that are critical in making a general diagnosis of a PD followed by a list of Do's and Don'ts that we hope will together serve as a cautious and useful guide for making valid PD diagnoses.

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Chapter 11
Alcohol Problems

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11.1 Description of the Disorder

Alcohol problems can be broadly defined as negative consequences that people experience as a result of their use of alcohol. People may drink alcohol for a number of reasons: to promote feelings of relaxation, to increase feelings of sociability, to elevate mood, to conform to social expectations, or to reduce feelings of stress (Anonymous, 2000). Information from the US National Survey on Drug Use and Health for 2007 indicates that approximately 82% of adults (aged 12-years and older) surveyed reported alcohol use sometime during their lifetime, 66% reported they had used alcohol during the year preceding the survey, and 51% reported using alcohol in the 30 days preceding the survey.

As well as measuring frequency of alcohol use, the 2007 US National Survey on Drug Use and Health also included measures related to drinking quantity. The report stated that approximately 23% of the adults sampled engaged in binge drinking (consuming five or more drinks on a single occasion) in the 30 days preceding the survey and 7% engaged in heavy drinking (five or more binges during the preceding 30 days). These findings suggest that over 55.8 million adults were engaging in drinking at a level that is potentially problematic, and almost 17 million were engaging in even heavier and potentially more hazardous alcohol use. Essentially, then, there is at minimum a one in five chance that an adult encountered in clinical practice in the United States has engaged in at least one binge-drinking episode in the past 30 days. Alcohol problems are highly influenced by environmental exposure and cultural norms, thus there is considerable cross-cultural variation in the prevalence of alcohol problems. Nonetheless, despite the difference in prevalence rates, the expression of alcohol problems is similar across cultures (Helzer et al., 1990).

According to the 2007 US National Survey on Drug Use and Health survey, 21 year olds reported the highest levels of alcohol use, with current alcohol use

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reported by 72% of the sample, binge drinking reported by 50%, and heavy drinking by 18%. Rates of current alcohol use were reduced in older age groups (68% in 23-year olds; 67% in 25-year olds; 62% in adults aged 30–34; 48% in adults aged 60–64; and 38% in individuals 65 and over). These findings are similar to reports from previous prevalence studies (Grant & Dawson, 1999). Although rates of heavy alcohol use are known to decrease with age, heavy alcohol use at an early age may have long-lasting consequences, influencing the level of education attained, subsequent employment, and involvement with the legal system.

Just as alcohol use occurs along a continuum from no use to heavy use, alcohol problems may also range in intensity from mild to severe, and, over time, from acute to chronic. Longitudinal studies (as supported by the US National Survey on Drug Use and Health data) indicate that the highest prevalence of problem drinking occurs in young adulthood. However, only 20–30% of individuals with early alcohol problems continue to have problems in later adulthood (Larimer & Kilmer, 2000). For some individuals alcohol problems follow a progressive course, for others problematic alcohol use either remains constant or resolves over time. Those diagnosed with alcohol problems in middle age are more likely to continue to have problems over time (Larimer & Kilmer, 2000).

Any attempt to describe alcohol problems is complicated not only by questions of intensity and duration, but also by the different ways alcohol problems may manifest in different individuals. Problematic alcohol use can affect physical functioning and may result in neurological consequences, increased susceptibility to infectious diseases, cardiovascular illnesses, or liver disease. It may affect mental functioning, resulting in impaired cognition, depression, or anxiety. Problem drinking can also affect marital and family relationships and work performance, and may precipitate legal problems. Some of the social consequences of alcohol problems include fetal alcohol syndrome, accidents resulting from driving while under the influence of alcohol, and increased levels of aggression and violence. Individuals may experience one or a combination of these negative consequences of problem drinking. Heather and Robertson (1997) state that "many problem drinkers show some or all of the following problems: they develop serious physical illnesses, they commit suicide, they experience severe depression and anxiety, they suffer prosecutions, evictions, and multiple legal suits, their marriages split up, they become isolated and friendless, they develop low self-esteem, and they die younger than they should" (pp. 124–125). Contextual issues must also be considered, with societal expectations influencing the perception of alcohol problems. For example getting drunk on the weekend may be considered acceptable (or at least tolerable) behavior for college students of both genders, but not for middle-aged women, who may resort to secrecy to avoid being shunned for such behavior.

It is essential to be alert regarding the possibility of alcohol-related problems when dealing with clients. Most people with severe alcohol problems do not seek formal treatment (Grant, 1997) and people who do seek treatment tend to wait an average of 10 years after symptoms appear (Schuckit et al., 1995, as cited in Larimer & Kilmer, 2000). Often individuals do not develop a full range of alcohol-related problems, but are affected in one or two areas. They may present with family problems, difficulties at work, emotional issues or physical problems. Such an individual may appear in the clinical setting “sober, well-groomed and with no telltale aura of alcohol. He or she will complain of any of a variety of medical and emotional problems” (Schuckit, 2000, p. 70). For purposes of diagnosis and assessment, an understanding of alcohol problems that incorporates consideration of biological, social and psychological elements is likely to prove most useful. When engaging in the assessment process it is necessary to focus on the symptoms and consequences experienced by the particular individual. Due to the widespread use of alcohol, and to the variable nature of the problems that excessive alcohol use can cause or exacerbate, it is important to include questions about alcohol use in any clinical encounter.

11.2 Procedures for Gathering Information

Clinicians need to be able to screen all clients for alcohol problems, make a formal diagnosis of alcohol abuse and dependence and conduct a comprehensive assessment for the purposes of treatment planning and evaluation. A variety of procedures are available to help the clinician accomplish these three tasks. Semi-structured and unstructured interviews are the most readily available and practical methods. In some settings, self-completion questionnaires administered in paper-and-pencil format or via computer are feasible. Medical settings may have laboratory and medical support for biochemical adjuncts to assessment such as liver functioning and blood alcohol levels.

11.2.1 Routine Screening for Alcohol Problems

Regardless of the client’s presenting complaint or problem, screening for alcohol use and related problems is advisable. Alcohol is often considered the “great mimicker” of mental health disorders. It is important to rule out alcohol as the underlying cause or contributor to a person’s difficulties. For example, depressive symptoms frequently occur with heavy alcohol consumption and typically endure for a number of weeks following abstinence (Brown, Inabe, Gillin, Schuckit, & Stewart, 1995). Alcohol withdrawal, which is experienced starting when blood alcohol levels begin to drop and which lasts for 48–72 h, is typically characterized by feelings of anxiety as well as dysphoria. In rare instances, intermediate and major withdrawal symptoms are experienced. In intermediate withdrawal, individuals can experience auditory or visual hallucinations, although the individuals typically recognize that the experience is unreal. The term *alcoholic hallucinosis* has been used to describe this rapid onset presentation that is frequently misdiagnosed as schizophrenia (Greenberg & Lee, 2001). Major alcohol withdrawal, often referred to as *delirium tremens*, involves severe agitation, global confusion, disorientation, and auditory, visual, or tactile hallucinations. Delirium tremens occur after 4 or 5 days of severe withdrawal (Kahan & Wilson, 2000).

Alcohol is also associated with a variety of stress-related symptoms and disorders, including gastro-intestinal problems, chronic pain syndromes, headaches, insomnia, fatigue, and sexual dysfunctions such as impotence. Cognitive functioning difficulties are also associated with heavy drinking. If screening is not part of a routine evaluation, then it should be initiated in response to any of these client concerns or clinical observations.

11.2.2 Approaches to Screening

11.2.2.1 Interview Methods

Screening involves asking clients specific questions about alcohol consumption. Integrating these questions into a review of health status is often the least threatening approach. The following questions generally provide a reliable indication of consumption:

> In the last week, how many days did you have a drink of alcohol, including wine, beer, or liquor? On each of these days, how many drinks did you have? Was the last week typical?

The use of specific questions helps avoid vague responses such as "social" or "light drinking." Providing a list of common drinks containing alcohol is also prudent to ensure that beer or wine coolers are included in the client's report. It is also important to provide the client with a definition of a standard drink and to ask about the size of a typical serving or to obtain descriptions of quantity in terms of bottle size. Table 11.1 provides pertinent conversion information.

Table 11.1 Standard drink conversions

Beverage (% alcohol)	Usual bottle size	Standard drinks	Usual serving	Standard drinks
Beer (5%)	340 mL (12 oz)	1.0	12 oz (340 mL)	1.0
Wine (12%)	750 mL (26.4 oz)	5.3	5 oz (140 mL)	1.0
	1000 mL (35.2 oz)	7.0		
	1500 mL (52.8 oz)	10.6		
Fortified wine (18%)	750 mL (26.4 oz)	7.5	3 oz (85 mL)	1.0
Spirits (40%)	340 mL (12 oz)	8.0	1.5 oz (43 mL)	1.0
	710 mL (25 oz)	16.6		
	1135 mL (40 oz)	26.6		
Wine coolers (5–7%)	340 mL (12 oz) variable sizes from 750 mL to 2 L	1.0–1.4	12 oz (340 mL)	1.0–1.4
Premixed liquor beverages (5–7%)	340 mL (12 oz)	1.0–1.4	12 oz (340 mL)	1.0–1.4

How much is too much? What level of consumption constitutes a positive screen and indicates that the clinician should ask further questions? One standard for evaluation of quantity involves comparing weekly consumption with empirically derived guidelines for low risk drinking versus hazardous drinking. For example, guidelines produced by the Centre for Addiction and Mental Health in Toronto recommend drinking no more than two standard drinks per day with a weekly limit of 14 for men and 9 for women (Kahan, 2000). Higher levels of consumption are associated with increased likelihood of psychosocial or physical problems. The US National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2005) guidelines recommends a weekly limit of 14 for men and 7 for women and, in addition, a maximum daily limit of four drinks for men and three drinks for women. Another commonly used indicator of potential problems, regardless of typical weekly quantity, is the consumption of five or more drinks on one occasion (Dawson, 1994; NIAAA, 2005).

The CAGE is a widely used screening interview for alcohol problems (Ewing, 1984; Mayfield, McLeod, & Hall, 1974). The CAGE assesses lifetime problems and has been validated for use in both general and clinical populations. The CAGE is comprised of four questions:

C: Have you ever felt the need to *cut* down on your drinking?
A: Have you ever felt *annoyed* by someone criticizing your drinking?
G: Have you ever felt bad or *guilty* about your drinking?
E: Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (*eye-opener*)?

A positive response to two CAGE questions suggests that further assessment is advisable, although there is evidence that one positive response for women is the optimal cutoff (Bradley, Boyd-Wickizer, Powell, & Burman, 1998).

An alternative interview questionnaire, the TWEAK, was developed for use with women, particularly inner city African-American women (Russell et al., 1994). The TWEAK has also been used to screen for harmful drinking in male and female samples of the general population, outpatient samples, and hospital inpatients (Chan, Pristach, Welte, & Russell, 1993). The five questions of the TWEAK are:

T: How many drinks can you hold? (3+ suggests *tolerance* and is scored 2 points)
W: Have your close friends or relatives *worried* or complained about your drinking in the past year? (2 points)
E: Do you sometimes take a drink in the morning when you first get up? (*Eye-opener*, 1 point)
A: Has a friend or family member ever told you about things you said or did while you were drinking that you could not remember? (*Amnesia* or blackout, 1 point)
K: Do you sometimes feel the need to cut down on your drinking? (*K(c)ut down*, 1 point)

A score of 3 or more points is the recommended cutoff.

11.2.2.2 Self-Completion Questionnaires

The CAGE and the TWEAK can be administered in a self-completion format or can be integrated into a clinical interview. Another well-validated screening scale is the Alcohol Use Disorders Identification Test (AUDIT; Babor, de la Fuente, Saunders, & Grant, 1992), which is a ten-item multiple-choice scale (see Table 11.2). The AUDIT is most easily administered in a paper-and-pencil format but can also be

Table 11.2 Alcohol Use Disorders Identification Test (AUDIT)[†]

Circle the number that comes closest to your actions during the past year	
1. How often do you have a drink containing alcohol?	
Never	(0)
Monthly or less	(1)
2–4 times a month	(2)
2–3 times a week	(3)
4 or more times a week (4)	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	
1 or 2	(0)
3 or 4	(1)
5 or 6	(2)
7 to 9	(3)
10 or more	(4)
3. How often do you have six or more drinks on one occasion?	
Never	(0)
Less than monthly	(1)
Monthly	(2)
Weekly	(3)
Daily or almost daily	(4)
4. How often during the past year have you found that you were not able to stop drinking once you had started?	
Never	(0)
Less than monthly	(1)
Monthly	(2)
Weekly	(3)
Daily or almost daily	(4)
5. How often during the last year have you failed to do what was normally expected from you because of drinking?	
Never	(0)
Less than monthly	(1)
Monthly	(2)
Weekly	(3)
Daily or almost daily	(4)
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	
Never	(0)
Less than monthly	(1)

(continued)

Table 11.2 (continued)

Circle the number that comes closest to your actions during the past year	
Monthly	(2)
Weekly	(3)
Daily or almost daily	(4)
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	
Never	(0)
Less than monthly	(1)
Monthly	(2)
Weekly	(3)
Daily or almost daily	(4)
8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?	
Never	(0)
Less than monthly	(1)
Monthly	(2)
Weekly	(3)
Daily or almost daily	(4)
9. Have you or someone else been injured as a result of your drinking?	
No	(0)
Yes, but not in last year	(2)
Yes, during the last year	(4)
10. Has a relative or friend or a doctor or other health worker been concerned about your drinking or suggested you cut down?	
No	(0)
Yes, but not in last year	(2)
Yes, during the last year	(4)
Record sum of item scores: _________	
Scoring: Each answer is weighted from 0 to 4 as indicated in the brackets. Please note that Questions 9 and 10 are scored, 0, 2 or 4. A score of 8 or more indicates that a harmful level of alcohol consumption is likely	

[†] Reprinted with permission from *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care*. Copyright 1992, World Health Organization

administered orally or via computer. The AUDIT covers three domains: alcohol consumption, alcohol dependence, and alcohol-related problems. It was developed for a six nation World Health Organization study on brief interventions conducted by primary care physicians and was designed to be applicable for use in a number of cultures and languages. Norms for specific populations (e.g., primary care, students, emergency room patients) are increasingly available. A cutoff of eight is recommended for general use.

Before the development of the AUDIT, the Michigan Alcoholism Screening Test (MAST; Selzer, 1971) was the most extensively used screening tool for many years. The MAST is composed of 25 true or false questions although a variety of short versions exist (e.g., Hedlund & Vieweg, 1984; Selzer, Vinoker, & van Rooijen, 1975). In comparison to the AUDIT, which was designed to identify individuals along a continuum of alcohol problems and focuses on current problems, the MAST items focus on extreme consequences of alcohol problems and, therefore, screens for lifetime alcoholism (i.e., severe dependence).

A final screening tool that is gaining in popularity is the AUDIT-C, which is a shortened version of the AUDIT comprised of the three "consumption" items (Questions 1–3, see Table 11.2). The AUDIT-C has been evaluated as a screening tool in the general population (Dawson, Grant, Stinson, & Zhou, 2005), for Veterans Affairs outpatients (Bradley, et al., 2001, 2003) and for primary care patients (Bradley et al., 2007). Optimal cut-off points for these two patient populations were: four and greater for men and three and greater for women.

11.2.2.3 Laboratory Markers

Current alcohol consumption (i.e., blood alcohol levels) can be validly assessed with breath, blood, saliva, and urine samples. Of these, breath samples measured with a hand-held breathalyzer are the easiest to obtain and they provide immediate results. Despite this, even alcohol specialists are unlikely to use breathalyzers routinely.

Laboratory markers can be useful adjuncts for screening longer-term heavy alcohol consumption. These markers commonly include a number of liver enzymes, mean red blood cell volume (MCV) and carbohydrate-deficient transferrine (CDT), a glycoprotein involved in transporting iron to body tissues. The liver enzymes commonly include GGT (gamma glutamyl transferase), AST (aspartate aminotransferase), and ALT (alanine aminotransferase). These markers vary considerably in their sensitivity and specificity and are generally less accurate than self-report measures. Efforts are being made to validate algorithms that use combinations of these markers with or without self-report scales (Allen & Litten, 2001).

11.3 Case Illustration

Ted is a 31-year-old man with 1 year of a vocational college program. He has been divorced for 8 years after 3 years of marriage. His 10-year-old daughter lives with his ex-wife although he sees her regularly and has a good relationship with her. He lives in the basement of his mother's house in a self-contained apartment. Ted works as a long distance truck driver but is currently on disability for depression. He has been on disability for 2 weeks since he made a suicide attempt following the end of a relationship with a girlfriend. His family physician noted elevated MCV and GGT values following routine blood work and, as a result, briefly screened for alcohol problems. Ted scored 4/4 on the CAGE questions and acknowledged that he often drinks more than five drinks per occasion. A referral was made to a specialized substance abuse treatment center.

The treatment center routinely administers the Addiction Severity Index (ASI) as part of its intake procedure. The ASI identified that Ted has concerns and treatment needs in the social, employment, psychological, and alcohol areas. He began drinking socially at age 16 and by age 18 was consuming 26 oz of rye on Friday and Saturdays (17 standard drinks each day) plus 2–3 beers each weekday night (totaling 45 drinks per week). This pattern continued until 5 years ago when he attempted to control his drinking, with periods of abstinence interspersed with 3–4 day binges every 3 months or so. During these binges he consumed about three 40-oz bottles of liquor (80 standard drinks). He smokes cigarettes but uses no street or prescription drugs. Ted was drinking when he made the recent suicide attempt but has been abstinent since.

Ted had attended a number of Alcoholic Anonymous meetings over the past few years but had never successfully affiliated with the program. He has no other treatment involvement.

Ted was diagnosed with current alcohol dependence, meeting all of the seven DSM-IV criteria. Ted also reported that he continued to feel very distressed about the loss of his relationship, although he no longer felt suicidal. He was somewhat hopeful about his future.

The therapist completed the Readiness to Change Questionnaire (Hodgins, 2001) that indicated that Ted had a strong willingness to take action. He identified a goal of abstinence, recognizing that his previous attempts to cut down on drinking had been unsuccessful. The Brief Situational Confidence Questionnaire (Breslin, Sobell, Sobell, & Agrawal, 2000) revealed that he was confident in his ability to abstain when pressured socially to drink and when having pleasant times with others but, in particular, lacked confidence in resisting drinking when in conflict with others.

Ted agreed to attend a day treatment program at the center. The goals were to help him develop the coping skills needed to abstain from alcohol and prevent relapse. Anger management was identified as a particular area of need. He was also encouraged to attend AA as a potential longer-term support and as a vehicle to make nondrinking friends. Further assessment of his vocational skills was undertaken and Ted formulated a plan to return to school in about 2 years. Finally, his mood was monitored and further assessed during a period of abstinence and no mood or personality disorder was identified. Ted elected to continue to see an individual therapist after discharge from the treatment centre to work on interpersonal relationship issues.

11.4 Recommendations for Formal Assessment

11.4.1 Diagnosis

Diagnosis involves the determination of whether an individual meets the specific criteria or symptoms required for a disorder either currently (i.e., in the last month) or over his or her lifetime. Two alcohol use disorders are contained in the DSM-IV, alcohol abuse and alcohol dependence. Both alcohol abuse and dependence require that an individual's alcohol use and consequences lead to clinically significant impairment or distress, with the symptoms clustering in a 12-month period.

The diagnosis of alcohol abuse requires one or more of four criteria:

1. Recurrent drinking resulting in a failure to fulfill major role obligations at work, school, or home.
2. Recurrent drinking in situations in which it is physically hazardous (e.g., driving a car, operating machinery).
3. Recurrent alcohol-related legal problems (e.g., arrests for disorderly conduct).
4. Continued drinking despite having persistent or recurrent social or interpersonal problems caused or exacerbated by drinking (e.g., fights with spouse about alcohol).

In addition, the individual cannot ever have met the criteria for alcohol dependence, which are outlined below. To determine whether the abuse criteria are met requires specific questions in each of these areas, focusing on a specific time period. The time period is most often the past year (currently) or the time in the past when the person had been drinking the most frequently or heavily. For example, "During your early twenties when you were first working at the law firm, did drinking ever cause problems for you with your family? Your wife? Your boss or people at work? Your friends? What about acquaintances? Did you continue to drink despite these problems?" Clinical judgment determines whether difficulties are "recurrent or persistent."

The diagnosis of alcohol dependence requires three of seven criteria to be met in a 12-month period:

1. *Tolerance* (either a need for markedly increased amounts to achieve the desired effect or markedly diminished effect with the same amount). Most social drinkers experience some increase in tolerance as they become regular drinkers. This criterion refers to a marked increase in tolerance.

   Does it take more drinks for you to get drunk than it used to? Can you drink more than you used to drink? Do you find that drinking the same amount has less of an effect than before?

2. *Withdrawal* (either experiencing two or more withdrawal symptoms including hand tremor, increased heart rate, insomnia, nausea or vomiting, anxiety, transient hallucinations, psychomotor agitation, grand mal seizures, or drinking to avoid experiencing withdrawal symptoms).

   Do you have a drink in the morning to calm your nerves? How often do you experience sweating or shakiness the morning after drinking?

3. *Drinking more or longer than intended.*

   How often do you end up drinking more than you intend to drink or stay longer in the bar than you planned?

4. *Persistent desire or unsuccessful efforts to cut down.*

   Have you ever tried to cut back or quit? Were you successful? Have you thought about this a lot? Have you made rules for yourself about drinking, in order to limit your drinking?

5. *Preoccupation with drinking*. This criterion refers to a narrowing of behavioral repertoire so that the person is spending a great deal of time drinking, planning to drink or being hung-over.

   Do you spend a lot of time planning when or how you will be able to drink?

6. *Important social, occupational, or recreational activities are reduced or given up*.

   Does your drinking cause you to miss work or spend less time with friends or family? Have you given up activities (e.g., sports, playing music) because of drinking?

7. *Continued use despite recurrent physical or psychological problem caused or exacerbated by drinking*. This criterion involves two aspects: the individual must experience both an alcohol-related problem and continue to drink despite knowing that it is harmful. For example, an individual has a gastric ulcer but does not stop drinking.

   Has drinking caused psychological problems or made problems worse (e.g., depression, moodiness, sleep problems, anxiety, blackouts)? What about physical problems? Did you continue to drink anyway?

The formal criteria for the alcohol use disorders have evolved with each revision of the DSM. In the first edition (1952), alcohol problems were classified as personality disorders. In the last three editions, the general conceptualization has been stable, although the boundaries between the abuse and dependence categories have been adjusted. In the DSM-III-R, alcohol dependence required evidence of tolerance or withdrawal and alcohol abuse was a residual category. These criteria resulted in a more restricted definition of dependence than the current one. According to the DSM-IV, dependence does not require tolerance or withdrawal.

In the DSM-IV, a diagnosis of alcohol dependence at any time in a person's life preempts a diagnosis of alcohol abuse. In other words, if individuals are assessed as being alcohol-dependent at one time they no longer qualify for an alcohol abuse diagnosis at a later time period. Instead, course specifiers are used to indicate the current status of the dependence diagnosis. Having some symptoms but meeting fewer than the three required criteria is referred to as partial remission. Finally, the diagnostic criteria for other drugs of abuse (abuse and dependence) are identical to the alcohol use disorders.

11.4.2 Assessment

Assessment complements diagnosis by providing a more complete picture of the individuals' context and situation, allowing for more effective treatment planning. Assessment establishes a baseline for functioning that can be used by the clinician to evaluate progress during treatment. Table 11.3 outlines the important domains that should be included in a comprehensive assessment. In some of these areas standardized instruments are available that can serve to decrease interviewer time. Table 11.3 includes some of the more commonly used instruments, although a more

Table 11.3 Important domains in the assessment of alcohol problems

General dimension	Specific construct	Standardized tools
Alcohol dependence syndrome	Tolerance	Alcohol Dependence Scale (Skinner & Allen, 1982)
	Withdrawal (including seizures)	Short Alcohol Dependence Data questionnaire (Raistrick et al., 1983)
	Impaired control	
Alcohol quantity	Lifetime history	Lifetime Drinking History (Skinner & Sheu, 1982)
	Recent daily use (past month)	Timeline follow-back method (Sobell & Sobell, 1992)
		Form 90 (Miller, 1996)
Consequences	Health (liver, hypertension, nutritional, gastrointestinal, insomnia)	DrInC (Miller et al., 1995)
	Family	
	Social relationships	
	Employment and financial	
	Emotional (self-esteem)	
	Spiritual	
	Legal	
Association/circumstances of drinking	Functional analysis	Inventory of Drinking Situations (Annis, Graham, & Davis, 1987)
Comorbid psychiatric disorders	DSM Axis I and II	SCID, DIS, CIDI, Prime-MD (see below)
Other drug use	Prescription and illicit drugs	
	Nicotine, caffeine	
Family history	Biological and family exposure to alcohol	
Treatment history	Programs started and completed	
	12-Step involvement	
	Periods of abstinence or nonproblematic drinking	
Treatment goal	Goal (abstinence or moderation)	Brief Situational Confidence Questionnaire (Breslin et al., 2000)
	Self-efficacy	
Motivation	Readiness to change	SOCRATES (Miller & Tonigan, 1996; Readiness to Change Questionnaire (Rollnick et al., 1992)
	Reasons to change	Readiness to Change – Clinician Version (Hodgins, 2001)
	Family and social support	

comprehensive list is available through the National Institute on Alcohol Abuse and Alcoholism website (http://pubs.niaaa.nih.gov/publications/Assesing%20Alcohol/quickref.htm). For the majority of the listed instruments, interpretation guidelines are available based upon normative data.

In introducing instruments to clients, it is important to elicit full cooperation by explaining that they will receive feedback on their results and that this information will assist in developing a realistic treatment plan. The tenor for the assessment interview should be collaborative, with the assessor and client jointly committed to discovering those client features that will contribute to important decisions about future clinical management (NIAAA, 2005). The client should also be assured of confidentiality, and limitations to confidentiality should be clearly articulated.

Alcohol dependence syndrome, the first dimension listed in Table 11.3, is a construct that underlies the current DSM and International Classification of Diseases diagnostic systems. The syndrome, first articulated by Edwards and Gross (1976) consists of a constellation of psychological and physical features, including a narrowing of drinking repertoire, salience of drink-seeking behavior, increased tolerance, withdrawal, relief or avoidance of withdrawal symptoms with drinking, a subjective awareness of compulsion to drink, and reinstatement of the syndrome after abstinence. Not all of these features need to be present at one time to indicate alcohol dependence and the syndrome is conceptualized on a continuum of severity that is related to, but independent from, alcohol quantity and consequences. Severity of dependence is a modest predictor of both general outcome and appropriateness of treatment goals. More severe alcohol dependence is associated with less chance of successful moderation of drinking (Rosenberg, 1993). There are a variety of assessment instruments available to measure this construct. The Alcohol Dependence Scale (Skinner & Allen, 1982) and the Short Alcohol Dependence Data (Raistrick, Dunbar, & Davidson, 1983) are brief, easy to use, and have interpretation guidelines that are useful in providing feedback to clients.

Assessment of *alcohol quantity* was discussed in the alcohol screening section above. A common feature of the recommended instruments for assessing quantity (Table 11.3) is that each provides a structure that enhances memory cues in order to help the individual reconstruct drinking patterns. For each of these instruments reliability and validity is good.

The *consequences of heavy alcohol* use are potentially wide ranging and include: health, family, social, legal, employment, financial, emotional, and spiritual consequences. Individuals are typically forthcoming about these effects when they are well-engaged with the interviewer, although a less direct way to inquire about consequences is to ask whether others have been concerned about the potential for consequences for the drinker. For example, “Has your wife ever worried about the effect of your drinking on the family?” The Drinker Inventory of Consequences (DrInC; Forcehimes, Tonigan, Miller, Kenna, & Baer, 2007; Miller, Tonigan, & Longabaugh, 1995) is a self-report instrument that inquires about 50 common consequences occurring over the past 3 months or over the individual’s lifetime. A computer-based version (Hester & Squires, 2008; Squires & Hester, 2002) and a briefer, 15-item version are also available.

Many treatment approaches include relapse prevention training, which involves preparing an individual to cope with a variety of precipitants to drinking. *Functional analysis* is used to identify the circumstances surrounding an individual’s use, in particular conditioned cues or "triggers." Specific instances of drinking are identified and examined in detail including the internal (e.g., emotional) and external (e.g., situational) triggers. For example, negative affective states, internal triggers, are a prime precipitant to alcohol relapse (Hodgins, el-Guebaly, & Armstrong, 1995).

Alcohol use frequently co-occurs with other drug use and other psychiatric disorders. These disorders often complicate the course and outcome of alcohol problems and, as a consequence, have major implications for treatment planning. *Comorbid disorders* can also serve to enhance the motivation of individuals to address their drinking problem and may, therefore, hasten recovery. Diagnosing comorbid psychiatric disorders is challenging for a variety of reasons, including the fact that heavy alcohol use can mimic other disorders (e.g., depression, anxiety). As well, heavy alcohol use can be symptomatic of a primary psychiatric disorder. For example, heavy use may be associated with the acute phase of bipolar disorder or with the impulsivity associated with borderline personality disorders. Structured diagnostic interviews (see below) can be helpful in identifying comorbid disorders, but a longitudinal approach to assessment, using all the available sources of information, is often required for a valid diagnosis and accurate understanding of the relationship between disorders.

When an individual is being assessed or treated for drug use, it may be possible to miss or discount comorbid alcohol problems. The symptoms and effects of using crack cocaine, for example, can be quite flagrant, and may obscure alcohol problems. Crack users may state that they tend to use alcohol before using crack, but identify crack as the problem. It may require time and persistent questioning, perhaps including functional analysis, to clarify the frequency and quantity of alcohol use. Sometimes it requires some abstinence from crack for individuals to realize they may also be abusing or dependent on alcohol.

Table 11.3 outlines a number of additional important assessment domains including *family history* and *treatment history*. These domains are typically assessed through a clinical interview. An understanding of an individual's exposure and reaction to 12-step programs, such as Alcoholics Anonymous (AA), is included because this variant of the disease model of alcohol problems is predominant in formal treatment programs in North America. AA is also a readily accessible resource for those clients who affiliate successfully with the program.

The clients' *personal consumption goal* of abstinence or reduction in drinking is another relevant assessment domain. Consistent with the disease model orientation, most North American treatment programs require that the client's treatment goal be abstinence from drinking. Elsewhere in the world, greater flexibility is allowed, in particular with clients with less severe alcohol dependence. Research indicates that clients prefer to choose their own goal and that clients who begin with the goal of moderating their drinking may also modify their goals over time, typically through a trial and error process (Hodgins, Leigh, Milne, & Gerrish, 1997).

Self-efficacy, the client's belief in their ability to resist heavy drinking, is an important related construct that changes with treatment involvement and is predictive of outcome. One approach to measurement of self-efficacy involves having the client rate their degree of confidence for a large number of potential drinking triggers.

Low self-efficacy in a particular area provides an individualized direction for treatment intervention.

The final general assessment domain listed in Table 11.3 is *motivation*. This domain includes the client's readiness to change, reasons for change, and family and social support. Readiness to change is typically conceptualized using Prochaska and DiClemente's model of the stages of behavior change (Prochaska, DiClemente, & Norcross, 1992). Readiness to change is viewed as a fluid construct that is influenced by the therapist and other life context factors. According to the model, interventions are more likely to be effective if they are stage appropriate. For example, individuals in the precontemplation stage are more likely to respond to general information about alcohol problems than to benefit from action-oriented therapy (e.g., drink refusal skills training). Table 11.3 includes three measures of readiness to change. SOCRATES (Miller & Tonigan, 1996) and the Readiness to Change Questionnaire (Rollnick, Heather, Gold, & Hall, 1992) are brief inventories that clients complete. The third measure is a clinician version of the Readiness to Change Questionnaire that the clinician completes following a face-to-face assessment, so as to reduce the burden on the client, of a lengthy assessment. The clinician version shows good agreement with the client version (Hodgins, 2001).

Assessing reasons for change not only provides helpful information for treatment planning, but can also serve to enhance the client's readiness. When queried, clients typically identify a number of different reasons for change, some of which may not have previously been as salient to them. The assessment process underscores these concerns for the client.

Finally, family and social support for change cannot be assumed and are therefore important to assess. Problem drinkers typically have family and friends who are also heavy drinkers who, as a result, may be ambivalent toward changes in the client's behavior.

11.5 Standardized Interview Formats

11.5.1 Diagnostic Interviews

A number of standardized and structured interview formats are available for both diagnosis and assessment of alcohol problems. For DSM diagnosis, the most widely used instrument is the Structured Clinical Interview for DSM-Patient Edition (SCID; First, Spitzer, Gibbon, & Williams, 1997). The SCID includes an alcohol use module as well as modules for most other Axis I disorders. Questions are provided for each diagnostic criterion and the clinician is expected to probe responses to determine whether or not a specific threshold is reached. The SCID is designed to be administered by clinicians trained in its use and good reliability and validity have been demonstrated for alcohol use disorders (Kranzler, Kadden, Babor, Tennen, & Rounsaville, 1996). The SCID is available commercially.

Two alternative diagnostic interviews are the Diagnostic Interview Schedule (DIS; Robins, Helzer, Cottler, & Goldring, 1998) and the Composite International Diagnostic Interview (CIDI; World Health Organization, 1997). The DIS and CIDI are very similar instruments that were developed for use by trained lay interviewers in epidemiological studies. In contrast to the SCID, they are fully structured interviews that do not require clinical judgment. The inter-rater reliability has been demonstrated to be excellent and the test–retest reliability and validity are good (Andrews & Peters, 1998; Robins et al., 1998). The DIS instrument and training are available commercially and the CIDI and information about training is available through the World Health Organization supported centers worldwide (http://www.hcp.med.harvard.edu/wmhcidi/index.php).

The PRIME-MD (Spitzer et al., 1994) is a briefer alternative to the more lengthy diagnostic interviews described above. It was developed for use by primary care physicians and provides DSM diagnoses of mood, anxiety, somatoform, and alcohol use disorders, the disorders most commonly seen in primary care. A one-page screening questionnaire is completed by patients in a self-report format (which includes questions similar to the CAGE described above) followed by a structured interview in the areas of potential problems. The PRIME-MD showed good agreement with clinical diagnoses including alcohol abuse and dependence (Spitzer et al., 1994). Moreover, the instrument has also been used to identify comorbid psychiatric disorders in patients with alcohol disorders (Johnson et al., 1995).

11.5.2 Assessment Interviews

Structured and semi-structured assessment interviews cover many of the major domains outlined in Table 11.2. One of the most widely used in both clinical and research settings is the Addiction Severity Index (ASI; McLellan, Luborsky, O'Brien, & Woody, 1980; McLellan et al., 1992). The ASI is a semi-structured interview designed to address seven potential problem areas: medical status, employment, drug use, alcohol use, legal status, family/social status, and psychiatric status. In about 1 h, an interviewer can gather information on recent (past 30 days) and lifetime problems in all of the problem areas. The ASI provides an overview of problems related to substance use, rather than focusing on any single area. It has been used with mental health, homeless, pregnant, and prisoner populations, but its major use has been with adults seeking treatment for substance abuse problems (Hodgins & el-Guebaly, 1992; McLellan, Luborsky, Cacciola, & Griffith, 1985). The ASI provides two scores: interviewer severity ratings, which are subjective ratings of the clients' need for treatment, and composite scores, which are measures of problem severity during the prior 30 days that are calculated by a computerized scoring program. The composite scores are sensitive to change and are typically used to evaluate outcome. It has also been shown that the ASI composite scores might hold utility as a diagnostic screening instrument for alcohol dependence (Rikoon, Cacciola, Carise, Alterman, &

McLellan, 2006). The ASI can be obtained from the National Institute of Drug Abuse (http://www.nida.nih.gov/).

The Comprehensive Drinker Profile (CDP; Miller & Marlatt, 1984) is a longer commercially available structured interview covering consumption, related problems, medical history, other drug use, and motivations for drinking and change. Card sorts are used to help the client provide information about drinking settings and preferences and other drug use. The CDP incorporates the MAST questions as well as a grid to determine typical drinking patterns. The interview takes about 2 h to complete, although a briefer version is available. The CDP was used as the model in developing Form 90, which was the major assessment instrument used in Project Match, a large multisite outcome study. Reliability and validity of Form 90 has been extensively investigated and is generally good in the research context (Rice, 2007; Tonigan, Miller, & Brown, 1997).

11.6 Impact of Race, Culture, Diversity, and Age

As indicated in the introduction to this chapter, race and culture influence the prevalence of alcohol problems. Within each racial and cultural group, men drink more and experience more alcohol-related problems than women, which is one of the few universal gender differences in human social behavior (Obot & Room, 2005), and younger people drink more than older people. These factors also interact with context and biology. African-American men, for example, experience relatively high rates of cirrhosis (Herd, 1994) and Asian Americans have low levels of alcohol use compared to the general population. This latter difference relates in part to the protective alcohol "flushing reaction" that is experienced by some Asians but might also be due to religious prohibition for some groups (i.e., Moslem religion in Malaysian and Indonesian groups) (McNeece & DiNitto, 1998). Therefore, clinicians must expect a substantial degree of variation both among and within different special populations, whether defined by race, culture, diversity, age, or gender. Although a great deal of descriptive research has been reported, results are complex and subgroup specific. An excellent review is provided by McNeece and DiNitto (1998).

In terms of diagnostic assessment, the stigma associated with alcohol problems varies among these groups, which may affect the degree to which individuals are willing to disclose use and related issues. The effects of discrimination, stress, and poverty suffered by minority group members also can encourage stress-related drinking.

Although the expression of alcohol problems is generally consistent across cultures, it is also clear that culture "colors" diagnostic syndromes, with personal distress often most likely to be expressed as somatic syndromes (Escobar & Vega, 2006). In this vein, Tien, Schlaepfer, and Fisch (1998) demonstrated a strong link between unexplained physical symptoms and extreme alcohol use in a community sample. Although the need for separate treatment programs for special populations is controversial (McNeece & DiNitto, 1998), it is clear that an understanding of the meaning of alcohol and alcohol use for the individual is important assessment information. As with any assessment, appropriate cultural, racial, and gender sensitivity is crucial.

Assessing alcohol use in younger adults can pose special challenges. The practice of binge drinking is common in North America, particularly among young adults. It is often considered normative behavior, despite its potentially disastrous consequences. An assessment may begin by identifying a number of binges, but the individual may not consider these to be of concern. By using reflection and summarization, it may be possible to obtain rich detail concerning the situations and consequences of binges from the person being assessed. If this process is allowed to continue, it may lead to recognition that even if the individual does not consider the alcohol consumption to be problematic, they are dealing with adverse consequences, which could include risky sexual behavior, use of other drugs, gambling, physical danger, and potential rape.

11.7 Information Critical to Making a Diagnosis

People suffering from alcohol problems have the reputation of having a predisposition toward denial and minimization and, as a result, are often believed to be less than honest in their self-reports of drinking and its consequences. At a recent medical school lecture, one professor recommended that clinicians assume that their patients are drinking double the amount that they report. Research evidence, on the other hand, suggests that self-reports are generally accurate (Sobell & Sobell, 2003), although individual variability exists. Validity of self-report can be maximized when: the client is alcohol-free and not experiencing acute withdrawal symptoms, rapport has been established and the client understands the limits to confidentiality, the client does not have an obvious reason to distort the information, the interviewer is nonjudgmental, questions are specific and structured and the client believes that self-reports will be checked against other sources of data (Sobell & Sobell, 2003). Use of multiple sources of data is highly recommended and can include collateral reports, official records, and laboratory markers. Collateral reports can be obtained from spouses, parents, adult children, and friends, and are more accurate when the collateral has greater opportunity to observe the client's drinking. Several studies have shown that when reports between clients and collaterals are discrepant, the clients have typically presented themselves more negatively than the collaterals (Sobell & Sobell, 2003).

Finally, a longitudinal approach to assessment can be helpful in increasing validity. It is important not to regard assessment as a single activity performed at a single point in time. Inaccuracies in information provided are often revealed over time and the assessment and treatment plan are then modified or fine-tuned.

A final critical aspect of any alcohol assessment is suicide risk. Completed suicides and suicide attempts are very common among alcohol-dependent individuals, with the depressed alcoholic group at highest risk (Winokur & Black, 1987). Suicidal risk has implications for treatment planning since many treatment venues are not equipped to monitor and support suicidal clients.

11.8 Dos and Don'ts

1. Do become familiar with a variety of treatment options. In most communities a variety of treatment options exist for people with alcohol problems, ranging from mutual support groups such as AA, outpatient therapy or counseling to more intensive day and residential programs. Although the majority of treatment providers in North America adhere to the 12-step disease orientation, alternative models also exist (e.g., cognitive behavioral orientation). We do not have validated guidelines for matching clients to treatment settings; however client preference as well as cost and availability are important considerations.
2. Do become familiar with the basic concepts and language associated with the recovery movement. Given the dominance of the 12-step disease model, therapists may be able to better engage clients if they understand the organization and major tenets of the AA program. Literature is readily available that describes the "big book," open and closed meetings, the 12 steps and 12 traditions, and so forth. It is also helpful to be able to understand and use the colloquialisms associated with the "program." For example, popular terms include "walking the walk" (being in personal recovery), "stinking thinking" (distorted negative cognitions), and "going back out" (relapsing).
3. Do recognize the potential secondary impact of conducting screening and assessment. Simply asking about alcohol consumption and related difficulties and providing normative feedback can enhance clients' motivation for change and help them formulate personal goals for improvement. Research on such "brief interventions" reveals that these small interactions with clients can lead to lasting change in drinking behavior (Bien, Miller, & Tonigan, 1993).
4. Don't assume that you and the client are speaking the same language. Ensure that you are both using the same definitions of terms such as standard drinks, blackouts, flashbacks, intoxication, and sobriety. Ted, in the case example above, described experiencing the "DTs" (delirium tremens) many times when he was, in fact, describing moderate withdrawal symptoms.
5. Don't assume reliability of client report without client abstinence. As discussed, alcohol use may be associated with invalid self-reporting. A related guideline is that the therapist is not able to judge accurately whether or not a client has consumed alcohol. The routine use of a breathalyzer is recommended.
6. Don't assume that a face-to-face clinical interview is superior to self-report questionnaires administered in paper or computer format. As well as increasing time efficiency, self-completion questions can engender less defensiveness on the part of the client. This may be particularly true when the client understands that some normative feedback will be available based upon his or her personal responses.

7. Do watch your use of labels. Use of emotionally loaded terms such as "alcoholics" and "alcoholism," or "drug addict" by the therapist is unnecessary in conducting an assessment and will often encourage denial or minimization of problems.
8. Do point out discrepancies gently. Discrepant information will often surface during the course of an assessment. The clinician can point these discrepancies out in a low key and respectful way to help the client provide an accurate answer. Discrepancies will often reflect the client's ambivalence about his or her problems and not necessarily represent dishonesty (Miller & Rollnick, 1991). In the case example above, Ted was asked during the ASI interview about his relationship with his boss, which he described as good. Later in the interview he described frequently missing work because of drinking. It is helpful to use the "Columbo" method – to be confused rather than confrontational over discrepancies. The interviewer noted the discrepancy by saying "earlier you said you had a good relationship with your boss but you also recognize that you often missed work." Ted clarified that his boss had, in fact, been very concerned about Ted's drinking.
9. Do get specific in your questions. It is good clinical practice to begin your interview, and each new area of inquiry during the interview, with open-ended questions to enhance engagement, but the clinician must move to specific questions in order to obtain reliable information.

11.9 Summary

Many clinicians consider alcohol problems to be a specialty area of practice. Indeed, many specialized treatment options exist for this population. However, the existence of specialized treatments does not excuse generalists and specialists in other areas from the need to screen for, diagnose and assess alcohol problems. A variety of effective methods are available, which allows clinicians to tailor approaches that fit well with their typical population and practices.

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Chapter 12
Drug Abuse

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In this chapter, we aim to present a framework for the assessment and diagnosis of drug abuse and dependence with an emphasis on integrating a dimensional approach into the traditional categorical system that currently provides the basis for the majority of our established diagnostic interviewing tools. The aim of supplementing categorical diagnoses with dimensional tools is to provide a broader clinical picture of symptomatology extending beyond whether or not an individual meets criteria for dependence or abuse. Specifically, a dimensional approach can provide further information in substance use disorders (SUDs) on the frequency and degree of use, associated impairment, as well as comorbid symptomatology that may co-occur with drug use. Using such information to supplement a diagnosis of drug dependence or abuse can enable a more individualized treatment plan that not only targets the psychological underpinnings of substance use but also the consequences of use as well. We take a clinical approach to the presentation of information, approaching diagnostic assessment comprehensively with four stages: screening, diagnostic assessment, dimensional assessment, and assessing treatment response. In sum, this chapter can be used as a clinical tool for the diagnosis of drug abuse and dependence at multiple stages, encompassing a broader scope beyond traditional methods of categorical diagnosis.

12.1 Description of the Disorder or Problem

The incidence and prevalence of drug use is a pervasive and costly problem in the USA. According to the 2006 National Survey on Drug Use and Health, 22.6 million people aged 12 and older met criteria for substance dependence or abuse

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in the past year, 7 million of those specific to illicit substances (SAMHSA, 2007). A diagnosis of *substance abuse* defined by the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; APA, 2000) pertains to a maladaptive pattern of substance use involving negative social or legal consequences that are also associated with clinically significant impairment or distress. Alternatively, *substance dependence* is defined by the DSM-IV-TR as portraying three or more of the following criteria in a 12-month period: (a) taking the substance in larger amounts or over a longer period than intended, (b) a persistent desire or unsuccessful efforts to cut down or eliminate substance use, (c) spending a great deal of time in activities associated with drug use, (d) reduction in important social, occupational, or recreational activities due to drug use, (e) continued use despite persistent psychological or physical problems caused by use, (f) tolerance, and (g) withdrawal.

Another system, the *International Classification of Diseases, Tenth Revision* (ICD-10; WHO, 1994), provides a classification for substance abuse and dependence and is considered the international standard diagnostic classification for general epidemiological and health management purposes, including the analysis of the general health situation of population groups and monitoring of the incidence and prevalence of diseases in relation to social, biological, and interpersonal variables. Although the DSM-IV and ICD-10 have similar definitions of substance dependence, the two systems have had different paradigms for less severe forms of maladaptive substance use that overlap only partially. For example, according to the DSM-IV, the diagnosis of substance abuse cannot be made in the presence of substance dependence, as one category subsumes the other. In contrast, this is not the case for harmful use in the ICD-10. Further, the DSM-IV and ICD-10 differ in their criteria for remission as well as their characterization of substance use. The DSM-IV characterizes substance abuse by negative *legal* and *social* consequences of recurrent or continued use whereas the ICD-10 includes a category for harmful use (a nonresidual category), which requires demonstrable *physical* or *psychological* harm. Although no current data support the adoption of one system over the other, studies point to a need for a careful interpretation of empirical results, at least in regard to abuse and harmful use.

Drugs are categorized into specific drug classes that differ based on their physiological and behavioral effects. These include cannabinoids (e.g., marijuana), central nervous system depressants (e.g., benzodiazepines), dissociative anesthetics (e.g., ketamine), entactogens (e.g., ecstacy), hallucinogens (e.g., LSD), inhalants (e.g., nitrous oxide), opioid analgesics (e.g., heroin), and stimulants (e.g., cocaine). Different drug classes have distinct physiological effects on the body, including effects of intoxication, potential adverse effects, as well as distinct likelihoods for tolerance and dependence. For example, a stimulant (e.g., cocaine) vs. an opioid analgesic (e.g., heroin) produces very different physiological and psychological effects. The drugs are typically used for very different functions and may lead to very different consequences. A cocaine user may report feelings of euphoria, increased energy, alertness, and rapid speech. Physiologically he or she may experience increased heart rate, temperature, and blood pressure. A heroin user, on the other hand, may experience reduced anxiety, tranquility, and sedation. The physical effects may include fatal respiratory depression, nausea, and vomiting. Each drug also tends to be associated with very different consequences. Cocaine is often linked with increases in sexual risk-taking behaviors and an increased likelihood of cocaine-induced paranoia, whereas heroin is often associated with increased risk of HIV infection through injection drug use, and intense physical withdrawal symptoms. Given the differences in function and consequences, it is important to examine differences in drug classes when conducting an assessment of drug abuse as well as when developing a treatment plan. For a more extensive review of drug class differences, we recommend referring to the work of Julien (2005), *A Primer of Drug Action.*

Substance use is a significant clinical issue for many reasons, namely the dire public health and economic consequences associated with chronic use, including increases in unemployment (Luck, Elifson, & Sterk, 2004), homelessness (e.g. Nyamathi, Wenzel, Keenan, Leake, & Gelberg, 1999), and violent crime (e.g. Friedman, Glassman, & Terras, 2001). An estimated $484 billion is spent each year on substance use-related costs, including treatment, prevention, health care expenditures, lost wages, reduced job production, accidents, and crime, with over 60% of these costs linked to drug-related incidents (Office on National Drug Control Policy [ONDCP], 2001). In addition to the troubling public cost statistics, drug use is also associated with engagement in multiple health-compromising behaviors (e.g., condom nonuse, multiple partners, impulsive spending) resulting in numerous adverse physical, social, and emotional consequences, including increased rates of HIV/AIDS (Avants, Marcotte, Arnold, & Margolin, 2003).

Drug use poses a significant public health concern particularly due to the difficulties in effectively treating drug-abusing individuals. Rates of treatment dropout from drug treatment programs have been shown to reach up to 50% (SAMHSA, 2009), which is notable given that the length of time in treatment is positively correlated with successful outcomes (e.g., Simpson, Joe, & Brown, 1997). Even for clients who remain in treatment, relapse and eventual readmission are fairly common, particularly when addiction is accompanied by comorbid psychiatric problems. In fact, estimates suggest that 90% of heroin and cocaine-dependent users experience at least one relapse within the first four years after treatment, with many relapsing considerably sooner (SAMHSA, 2009). Retrospective and prospective treatment studies report that most participants initiate three to four episodes of treatment over multiple years before reaching a stable state of abstinence (Hser et al., 1998). Thus, drug use is a significant public health concern due to the high financial costs of treatment, the risky health behaviors associated with drug use (e.g. HIV risk), as well as reduced job productivity and increased unemployment (ONDCP, 2001). This is an important consideration for clinicians and other professionals in understanding and diagnosing substance abuse, particularly in thinking about the factors that perpetuate treatment dropout and relapse.

12.2 Procedures for Gathering Information

There are a number of variables to consider when determining the best method of assessment for substance use problems. It is important to determine the goal of the assessment – specifically, whether assessment is aimed at screening for potential substance use problems, determining if an individual meets diagnostic criteria for SUD, developing a treatment plan and goals, and/or assessing treatment response. Variation in assessment environments (i.e., primary care, mental health or substance use treatment setting, correctional facility) will also play a role in determining the most appropriate assessment measure. In this section, we highlight the important considerations at each stage of assessment, namely screening, diagnostic assessment, dimensional assessment, and assessing treatment response, and provide recommendations for approaching the unique demands of each stage in different settings.

12.2.1 Screening

Screening for drug use often comprises the initial stage of drug abuse assessment, and it is typically the first time point where a clinician gathers information about a client. The type of screening may differ greatly based on the setting. For example, a primary care setting may often utilize screening tools as a standard procedure to detect for the presence of drug use or an SUD if not already known. The time-pressed nature of primary care settings necessitates the use of screening tools that are brief, clear, and easily administered. Alternatively, mental health and substance use treatment centers, both inpatient and outpatient, typically utilize screening measures that gauge more specific drug information, including different drug classes used and degree and frequency of use. Given the high rate of comorbidity between SUDs and other Axis I disorders, clinicians in mental health-specific settings may utilize screening instruments to detect drug use. Given the prevalence of psychological comorbidities and drug use, it is useful to capture in-depth information regarding a client's use, including level of impairment and frequency of use, to enable an understanding of the function of one's use. Since time is often not as limited as in a primary care waiting room, measures can be slightly lengthier.

Given the increasing numbers of drug-related crimes and drug users in the criminal justice system, it is also important to include information on the screening and assessment of drug abuse in correctional facilities. However, despite increasing need, standardized and validated clinical screening and assessment tools are lacking in this setting (Knight et al., 2002). Better methods to screen, assess, and subsequently match drug-abusing inmates to drug treatment programs have been advocated, especially those that capture a wider scope of drug-related needs, such as incorporating drug use severity, behavioral consequences, and other social and health problems. Encompassing these additional dimensions of drug use into assessment within this population is necessary to make appropriate estimates of service needs (see Belenko & Peugh, 2005).

In sum, a wide range of self-report screening tools may be utilized based on the type of setting and diagnostic purpose. Descriptions of the specific self-report screening tools available for drug abuse and dependence are provided in the section labeled "Recommendations for Formal Assessment."

12.2.2 Categorical Diagnosis

12.2.2.1 Substance Use

The next stage in formal assessment of SUDs is diagnosing drug abuse or dependence, which often includes gathering extensive information about a client's substance use history. A later section of the chapter is dedicated to the types of standardized interview formats for diagnostic assessment, but first we would like to introduce the main types of diagnostic assessment. The traditional system for diagnostic assessment of drug abuse and dependence, as with any psychological disorder or medical disease, relies on a categorical system that identifies the presence or absence of a disorder. The main types of classifications of drug abuse or dependence can be found in the DSM-IV-TR (APA, 2000) or the ICD-10 (World Health Organisation, 1994).

12.2.2.2 Psychiatric Comorbidity

The identification of an SUD is often only the first step in the diagnostic process. Evidence indicates that SUDs co-occur with the majority of adult DSM-IV-TR Axis I disorders. Community epidemiological data suggest that among individuals with SUDs, 53–76% have at least one other co-occurring psychiatric disorder (Zilberman et al., 2003), with mood and anxiety disorders being the most commonly occurring, followed by schizophrenia-spectrum disorders (Kushner, Abrams, & Borchardt, 2000). SUDs often also co-occur with Axis II disorders, specifically borderline and antisocial personality disorders, with estimates ranging from 5 to 32% and 14 to 69%, respectively (e.g., Trull, Sher, Minks-Brown, Durbin, & Burr, 2000). In fact, estimates from the Epidemiological Catchment Area (ECA) study suggest that SUDs are more strongly associated with antisocial personality disorder (ASPD) than with any other Axis I disorder (Regier et al., 1993). Of note, rates of comorbidity within psychiatric inpatient and residential substance abuse treatment facilities are considerably higher than within the general community (Mowbray et al., 1997).

Comorbid psychiatric diagnoses often play an influential role in the course of an SUD, particularly increasing the likelihood of treatment dropout, relapse, and other negative consequences of drug use. Thus, given the implications and prevalence of psychiatric comorbidities with drug abuse and dependence, including psychiatric diagnostic assessment as part of the drug abuse assessment is important, particularly in understanding how the multiple disorders may overlap and fuel each other. Standard interviews to diagnose psychiatric comorbidities are often the same as those used to assess drug abuse, and these are discussed fully in the section labeled “Standardized Interview Formats.”

12.2.3 Dimensional Assessment

Incorporation of a dimensional approach, defined as a summation and/or evaluation of specific symptomatology beyond the classification of the presence of a given disorder, is useful in conjunction with diagnostic assessment (Helzer et al., 2006). Assessing the specific symptoms a client may experience in line with their substance use, as well as comorbid symptomatology, can enable a more in-depth understanding of the function of one’s use. Consider a client suffering from depressive symptoms; low mood or hopelessness may be a trigger for his use. Thus, for this client, targeting these symptoms as part of treating his substance use can also greatly improve the success of addiction treatment, even if he does not meet full DSM-IV criteria for major depressive disorder (MDD). Assessing specific symptoms can also serve to distinguish individuals who may meet criteria for the same diagnosis but have very different symptom presentations. For example, consider two clients who both meet criteria for borderline personality disorder (BPD) in addition to substance dependence. For one client, the crux of this comorbidity may involve extreme fear of abandonment and interpersonal conflict, while for the other, impulsivity and affective instability may be at the core of the diagnosis. For these two clients, the comorbid BPD diagnosis may play a very different role in the context of substance use. Thus, in understanding the function of specific comorbidities in line with SUDs, it may be important to further distinguish symptom presentations even for individuals with identical diagnoses. Although diagnostic instruments based on a dimensional approach will likely become more readily available with the release of the DSM-V (Helzer et al., 2006; Nunes & Rounsaville, 2006), clinicians can begin to implement a dimensional approach with existing self-report and diagnostic tools.

Altogether, a client’s diagnosis, comorbid symptomatology, associated impairment, and characteristics related to drug use (i.e., frequency and degree of use) can serve as a basis for determining the appropriate treatment. Although the procedures in determining the appropriate treatment setting are beyond the scope of this chapter, the interested reader is referred to a review of the research foundations backing client placement criteria in *Addiction Treatment Matching: Research Foundations of the American Society of Addiction Medicine (ASAM) Criteria* (Gastfriend, 2004).

This comprehensive assessment approach can also aid in the establishment of a treatment plan. In particular, a functional analysis approach can be used in the context of substance use treatment to develop a treatment plan or as a component of treatment. A functional analysis is a behavioral method that assesses environmental triggers for substance use and is used to guide the client, as well as the clinician, in understanding the cycle and patterns of one's drug use. Specifically, a functional analysis involves a discussion of the antecedents and consequences of drug use to understand what *function* the drug use is serving. This can involve emotional and environmental antecedents, as well as positive and negative consequences. Working together, the therapist and client identify high-risk situations and the (1) trigger for that situation, (2) thoughts during that situation, (3) feelings experienced in response to the trigger and thoughts, (4) drug use behavior, and (5) positive and negative consequences of drug use. Incorporating information from self-report symptom scales and clinical interviews can guide a functional analysis, such as identifying primary symptoms that may be acting as triggers or consequences of substance use. In sum, having a more in-depth clinical picture of comorbid symptoms can enable a fuller understanding of how specific symptoms may align with one's cycle of addiction.

12.2.3.1 Treatment Response

Once treatment has commenced, various tools may be used to gather information about progress in treatment as well as determine outcomes once treatment has been completed. Many of the initial diagnostic instruments used prior to treatment can be utilized to determine remission from substance abuse or dependence (e.g., the SCID-I or the PRISM-IV). Beyond the categorical classification of remission, a clinician can assess treatment progress by utilizing self-report assessments of substance use frequency, severity, and associated impairment in emotional, social, and occupational functioning. In addition, a biological assessment of drug use can be used to supplement self-report information of drug use frequency, such as urine, blood, saliva, and/or hair samples. A dimensional approach can even be taken with regards to drug testing, such that quantitative and semiquantitative tests have been developed to be more sensitive to changes in the pattern, frequency, and amount of substance use (Preston, Silverman, Schuster, & Cone, 1997). Thus, in addition to indicating the presence or absence of a drug, quantitative methods can be useful in detecting drug use reduction and more subtle effects of treatments. Further descriptions of tools that can be used to assess treatment response are provided in the section labeled "Recommendations for Formal Assessment."

12.3 Case Illustration

The client (Sheila) is a 36-year old African American female who was voluntarily attending 30 days of treatment at a community residential substance use treatment center for her crack/cocaine use. At the time of treatment entry, she reported living with her boyfriend of 3 years and their two children, a 4-year-old son and an

11-month-old daughter. Sheila completed high school and had worked on and off for 17 years as a nurse at an assisted living facility. About 1 year ago she was fired permanently largely due to absence from work and substance-induced impairment at work. She has struggled to find employment since. She indicated that prior to coming to treatment she spent most of her time at home not doing much, and it was difficult even to just get out of bed in the mornings to get her son to school. After bringing her older son to school, she would spend the rest of the day at home with her daughter. Sheila reported that her daughter, born cocaine-dependent, cries uncontrollably and rarely smiles, plays, or responds to her mother. Sheila reported that sometimes she feels that her daughter does not even recognize her. Sheila reported smoking crack/cocaine at home, often as a result of the frustrations and stressors of child-rearing, as well as the guilt she felt due to the inability to connect with her daughter. Sheila's drug use during the day made her often unable to pick up her son at school, and it became the source of a lot of arguments with her boyfriend. Sheila decided to enter treatment primarily to be able to be a better mother to both children and received a residential treatment placement as part of a government agency that provides 30 days of free inpatient treatment. Sheila asked her sister to care for her children during her 30-day stay in residential treatment.

The intake interview took place on her third day of residential treatment. She displayed psychomotor retardation and her thought process was somewhat clouded; however, no obvious perceptual abnormalities were evident. Her speech volume and tone were within normal limits, yet her speech rate was slow. At intake, the SCID-I and the Addiction Severity Index (ASI) were administered to determine substance dependence, substance use history and severity, environmental strengths and stressors, and comorbid psychiatric diagnoses. Based on this assessment, she met criteria for current crack/cocaine dependence; she also reported past alcohol dependence over 10 years ago when she first began using drugs regularly, but crack/cocaine had become her sole drug of choice over the last two years. She reported an extensive family history of substance use including her father's crack/cocaine dependence, who had passed away about 5 years ago. In her current environment, her boyfriend uses crack/cocaine and alcohol regularly. She reported that he is unwilling to seek treatment for his substance use and has interfered with her past abstinence attempts, yet he has been able to maintain a job to support Sheila and the children.

The assessment of psychiatric symptoms indicated the presence of depressive symptoms. Specifically, she endorsed the MDD criteria of anhedonia, weight loss, psychomotor retardation, and feelings of guilt and worthlessness. She expressed that much of these symptoms are present and/or worsened when she thinks about how her drug use has affected her inability to be a mother, and in particular how it has interfered with her daughter's physical and psychological development. Although she endorsed four criteria for MDD, she did not meet full criteria for the disorder at intake, yet the interviewer made note of her elevated depressive symptoms. In addition, the final case summary from the interview indicated that Sheila met criteria for current crack/cocaine dependence and past alcohol dependence.

Following review of her initial assessment, a preliminary treatment plan was developed to treat her crack/cocaine dependence. To gain more information about the presence of depressive symptoms, the primary treatment counselor administered the BDI-II. The self-report measure illustrated a more complex clinical picture; Sheila scored a 13 on the BDI-II, indicating the presence of mild depressive symptoms. Rather than proceed with the preliminary treatment plan to target crack/cocaine dependence in isolation, the counselor conducted a functional analysis to gain a sense of how depressive symptoms contribute to Sheila's substance use. The functional analysis illustrated the specific types of emotions that precipitated her use (shame, guilt, boredom, sadness), as well as the consequences of her drug use, which also served to elicit these emotions. Specifically, Sheila's functional analysis revealed that when she would fail at mothering responsibilities with either child, she would experience intense guilt and sadness, which would trigger her to use crack/cocaine. Following her use, she would be unable to care for her infant at home or pick up her son at school, and this would serve to exacerbate feelings of guilt and shame. In response, she would turn to her only learned coping mechanism: drug use. This cycle of negative emotions and substance use became a core target of her treatment plan, demonstrating the importance of assessing specific comorbid symptomatology in relation to substance use and including this information in a treatment plan. The functional analysis guided Sheila's treatment plan, which in addition to the standard substance use treatment based on the 12-step philosophy of Alcoholics Anonymous/Narcotics Anonymous (AA/NA) included groups focused on coping with depression, stress management, and healthy family relationships. Sheila was an active participant in groups throughout her entire time in treatment, and she completed her 30-day contract without any conflicts at the center.

Following her stay in residential treatment, Sheila returned to her household. Her sister offered to care for her children for the first few weeks, so that Sheila could focus on her sobriety and obtaining employment. Her husband was living with a friend, as Sheila did not want his use to interfere with her sobriety. After about 2 weeks, Sheila secured her former job as a nurse at an assisted living facility as a conditional hire if she remained abstinent. After 1 month, Sheila's children returned to home, as did her husband. Sheila was able to remain abstinent for approximately 60 days. However, following an altercation with her husband and cumulative stressors related to child rearing, Sheila began using again. She quickly fell back into the same cycle of use she was formerly in prior to treatment. She was able to hide it from her employer for 1 month, but was fired when one day she showed up to work intoxicated. After 2 weeks of continued substance use and unemployment Sheila reentered residential treatment, leaving her children with her sister.

12.4 Recommendations for Formal Assessment

In this section, we provide more detailed recommendations for the stages of assessment introduced earlier. A detailed description of potential screening measures is provided in Table 12.1. Further, including comorbid diagnoses and specifying specific symptoms can provide a more in-depth clinical picture of the factors that may be driving one's use. As such, Table 12.2 provides detailed descriptions of dimensional and symptom-based assessment tools that can be utilized to gather additional information when establishing

Table 12.1 Screening instruments

Primary health care settings	
CAGE (Cooney et al., 1995)	Consists of 4 questions used to screen for a substance use problem. Each "have you ever" question can be answered either "YES" or "NO" and each positive response gets 1 point. A score of 1 of 4 indicates "possible," and 2 detects most cases of substance misuse. Because it requires less than 1 min for administration, it is a useful bedside clinical desk instrument for family practice physicians, general internists, and nurses. The CAGE has a sensitivity and specificity of 86% and 78%, respectively. It is of note that because many false positives have been reported among women when using the CAGE (due to the question about guilt), the TACE was developed as a gender appropriate version for women.
Alcohol, Smoking, Substance Involvement Screening Test (ASSIST; Ali et al., 2002)	8-Item interview questionnaire developed to detect psychoactive substance use among primary care patients. The ASSIST provides information about the specific substances patients have used including tobacco, alcohol, cannabis, cocaine, amphetamines, stimulants, sedatives, hallucinogens, inhalants, opioids, and other drugs, as well as the time period of use including lifetime and past three months. Additional items assess problems related to substance use, the risk of current or future harm, level of dependence, and method of use (e.g., needle injection). The ASSIST is especially designed for use by health care workers in a range of health care settings.
Prescription Drug Use Questionnaire (PDUQ; Compton et al., 1998)	20-Min semistructured interview that was developed to identify pain patients who are likely to become either nonaddicted, a substance abuser, or substance dependent on pain medication. The PDUQ has demonstrated an acceptable internal consistency of 0.79.
Screener/Opioid Assessment for Patients with Pain (SOAPP; Butler, et al., 2004)	14-Item self-report tool to determine which chronic pain patients are at risk for long-term addiction to opioid medication. It has an internal consistency of 0.74 and test–retest reliability of 0.71.
Impairment and consequences of substance use	
Drug Use Identification Test (DUDIT; Stuart et al., 2003)	Modeled after the *Alcohol Use Disorders Identification Test* (AUDIT; Saunders, Aasland, & Babor et al., 1993), The DUDIT is an 11-item self-report measure to screen for drug-related problems across the following drug classes: cannabis, cocaine, hallucinogens, stimulants, sedatives, and opiates. The DUDIT has demonstrated strong reliability (0.80) and has predicted drug dependence in accordance with the DSM-IV and ICD-10 at 78% and 88%, respectively (Berman, Bergman, Palmstierna, & Schlyter, 2005). A shorter version of the AUDIT has been developed specifically for use in primary care (e.g., the AUDIT-C, a 3-item measure of alcohol misuse).
Simple Screening Instrument for Substance Abuse (SSI-SA; Center for Substance Abuse Treatment, 1994)	16-Item measure in both interview and self-administered formats, which was developed to assess a broad spectrum of signs and symptoms for SUDs. The SSI-SA screens for five domains of substance use including substance consumption, preoccupation and loss of control, adverse consequences, problem recognition, and tolerance and withdrawal. The SSI-SA has demonstrated high sensitivity and excellent test–retest reliability.

Drug Abuse Screening Test (DAST; Skinner, 1982)	Consists of 20 items focused on lifetime severity of drug abuse and its consequences and provides an index of drug use severity. The DAST covers a variety of consequences related to drug use without specifying drug type, alleviating the necessity of using different instruments specific to each drug. It has a demonstrated internal consistency of 0.92.
Potential for addiction	
The MCMI-III (Millon & Meagher, 2004)	Using the 14-item drug dependence scale of the MCMI-III, high scores on this scale suggest a recurrent or recent history of drug abuse, a tendency to have poor impulse control, and an inability to manage the consequences of drug use and impulsive behavior. The scale has coefficients of 0.82 and 0.92 for internal consistency and test–retest reliability, respectively. The questions on the MCMI-III are subtle and indirect in asking about drug use, which has been argued as advantageous by some because it can detect individuals reluctant to discuss their drug use openly. However, this advantage also brings disadvantages. For example, one study found that only 49% of known drug abusers were identified with the MCMI-III drug dependence scale, questioning the clinical utility of the measure as an effective drug screening tool (Bryer, Martines, & Dignan, 1990).
Addiction Potential Scale (APS) of the MMPI-2 (Weed et al., 1992)	An additional measure that does not directly assess substance use behavior, but was designed to identify personality characteristics and lifestyle patterns that are associated with substance abuse is the *Addiction Potential Scale (APS)* of the *MMPI-2* (Weed et al., 1992). The APS is a self-report scale consisting of 39 true/false items with internal consistency and test–retest reliability of 0.77 and 0.69, respectively.
Correctional facilities	
Texas Christian University Drug Screen (TCUDS; Simpson et al., 1997)	The TCUDS has mainly been used in correctional facilities and may also be appropriate for intensive inpatient drug treatment facilities. The TCUDS includes 15 items that address key diagnostic criteria from the DSM-IV substance dependence diagnosis and the DIS substance abuse module. The criteria were adapted to be framed at a lower reading level (8th grade) and to be used in a format that is easy to self-administer. The TCUDS can be administered in interview or self-report format, and few differences have been found based on format (Brooner et al., 1997). The first section addresses 10 questions about problems related to drug use, and the second section addresses the frequency of specific drug use prior to prison, as well as self-assessment of readiness for substance abuse treatment. A composite score of drug use severity can be calculated using the first 9 items, and classification of dependence follows the DSM-IV criteria. The measure has shown high predictive validity, and good test–retest reliability (0.95).

Table 12.2 Dimensional and symptom bases assessment tools

Frequency, degree of use	
The Timeline Followback (TLFB; Fals-Stewart, O'Farrell, Freitas, McFarlin, & Rutigliano, 2000)	Semistructured clinical interview used to obtain self-report retrospective estimates of substance use. The TLFB uses a calendar method and other recall-enhancing techniques to assist individuals with their description of their daily substance use over a targeted time interval and has been successfully used to obtain information on illicit drugs. The TLFB has demonstrated high test–retest reliability, convergent and discriminant validity, agreement with collateral informants' reports of patients' substance use, and agreement with results from patients' urine analysis. The TLFB also may be useful for assessing other events and mood over this time period to assess the relationship between these variables and substance use.
Form 90D (Westerberg, Tonigan, & Miller, 1998)	Semistructured interview with intake and follow-up versions that assesses lifetime and past 90 day drug use of 12 drug categories. The assessment instrument utilizes a calendar format where the patient first fills in days of complete abstinence followed by days of drug use. In addition, quantity of use and routes of administration are assessed for each day. Thus, for every drug class the 90D format estimates age at first use, lifetime weeks of use, frequency of use in the current period, intensity of that use (by categorization), and relative use of various routes of administration. In addition, a strength of Form 90D is that it also assesses history of psychosocial and environmental variables such as treatment services received, living experiences, incarceration, work, and education experiences. The interview takes approximately 40–60 min. Computerized scoring and interpretation are available. The measure has demonstrated strong test–retest reliability, internal consistency, and criterion and construct validity. As with the TLFB, Form 90D also may be useful for assessing other events and mood over this time period to assess the relationship between these variables and substance use.
Impairment	
Addiction Severity Index (ASI; McLellan et al., 1992)	Most comprehensive and widely used measure to assess associated impairment. The ASI can be administered either as a self-report questionnaire or by a trained clinician in an hour-long interview. The ASI assesses drug and alcohol use, medical status, employment status, family history, legal status, psychiatric status, and family and social relationships. Because it identifies problem areas in need of targeted intervention, it has been used extensively in clinical settings for treatment planning and outcome evaluation. The ASI has consistently demonstrated strong internal consistency and test–retest reliability among treatment populations and homeless substance abusers. There are a total of 200 items within 7 subscales and it takes approximately 50 min to 1 h to administer. It is available in three different formats: pencil-and-paper self-administered, clinician interview, or computer-based.

Drug Use Screening Inventory (DUSI; Tarter & Hegedus, 1991)	149-Item measure that is useful when an in-depth clinical interview is not feasible. The DUSI is administered in either a paper and pencil or computerized format, which identifies 10 domains of functioning including severity of alcohol and drug use, physical and mental health status, and level of psychosocial adjustment. Internal consistencies have been reported at 0.74 for males and 0.78 for females and test–retest reliability has averaged 0.95 for males and 0.88 for females, respectively.
Inventory of Drug Use Consequences (InDUC; Tonigan & Miller, 2002)	50-Item self-report inventory of adverse consequences related to drug use, which was developed based upon the *Drinker Inventory of Consequences* (DrInC; Miller, Tonigan, & Longabaugh, 1995), a measure of alcohol-related consequences. The InDUC is distinct from screening instruments in that it measures adverse consequences of substance use including items referring to pathological use practices (e.g., rapid use), items reflecting dependence symptoms (e.g., craving), and items concerning help seeking (e.g., Narcotics Anonymous). The InDUC includes five scales including impulse control, social responsibility, and physical, interpersonal, and intrapersonal domains. Four of the five scales have demonstrated good to excellent test–retest reliability.
Assessing comorbid symptomatology	
Depression and anxiety	
Symptom	*Measures*
Depressive symptoms	*Beck Depression Inventory-II* (BDI-II; Beck et al., 1996) is a 21-item self-report inventory that assesses the severity of depressive symptomatology. Each item is rated on a 0-3 scale, with 3 indicating the most severe symptoms. Summary scores range between 0 and 63. The measure has demonstrated convergent and discriminant validity in numerous studies, and scores correlate more strongly with other measures of depression than with measures of anxiety (Beck et al., 1996). Two factors have been suggested for the BDI-II, one tapping affective and somatic symptoms of depression, and the other assessing predominantly cognitive symptoms (Beck et al., 1996). *Center for Epidemiological Studies Depression Scale* (CES-D; Radloff, 1977) is a short self-report scale designed to measure past two week affective components of depressive symptomatology including depressed mood, feelings of guilt and worthlessness, feelings or helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disturbance. High internal consistency has been demonstrated in the general (Cronbach's $\alpha=0.85$) and patient (Cronbach's $\alpha=0.90$) populations. Six month test–retest reliability on individuals reporting no negative life events was adequate ($r=0.54$). Discriminant validity is high between psychiatric inpatients and the general population and moderate among levels of severity within patient groups (Radloff, 1977).

(continued)

Table 12.2 (continued)

Hopelessness	*Beck Hopelessness Scale* (Beck et al., 1974) consists of 20 true–false statements that assess the extent of negative expectancies (pessimism) about the immediate and long-range future. Each of the 20 statements is scored 1 (*true*) or 0 (*false*). Item scores are summed to yield a total score, with higher scores indicating greater hopelessness. Internal consistency has ranged from 0.82 to 0.93 across a range of clinical samples, and correlations with the BDI have ranged from 0.46 to 0.76 (Beck, 1993).
Anxiety	*Beck Anxiety Inventory* (BAI; Beck & Steer, 1990) is a 21-item measure of anxiety symptoms. Each item assesses the degree to which physical or cognitive symptoms of anxiety have been present during the past week. The BAI has been shown to be a reliable and valid measure of anxiety in a variety of studies with clinical and nonclinical samples with coefficient alphas over 0.91 (Beck et al., 1988).
Posttraumatic stress	*Clinician Administered PTSD Scale* (CAPS; Blake et al., 1995) is a 30-item structured clinical interview designed to assess the 17 DSM-IV symptoms of PTSD. Each symptom is rated for frequency and intensity. In addition to providing a diagnosis of current PTSD (based on DSM-IV criteria), continuous scores representing the severity of past month PTSD symptoms can also be derived by summing frequency and intensity scores for each symptom and then calculating the sum of these composite scores. The CAPS has been used to assess PTSD among substance abusers in inpatient substance use treatment.PTSD checklist (PCL; Weathers, Litz, Huska,& Keane, 1994) is a 17-item self-report questionnaire based on the DSM-IV criteria for PTSD. The measure assesses the level of distress an individual has endured with regard to reported PTSD symptoms over the past 30 days. A five point scale is used for informant responding (1 = *not at all*, 5 = *extremely*). A study with 27 motor vehicle accident victims and 13 sexual assault victims (Blanchard et al., 1996) yielded high correlations (overall $r = 0.93$) between symptom ratings derived from the PCL and the CAPS.
Disinhibition and emotion regulation	
Construct	*Measures*
Emotion regulation	*Difficulties in Emotion Regulation Scale* (DERS; Gratz & Roemer, 2004) is a 36-item self-report measure developed to assess individuals' difficulties understanding, accepting, and modulating emotions and choosing goal-directed actions when distressed. It includes six subscales that measure the nonacceptance of emotional responses; difficulties engaging in goal-directed behaviors when distressed; difficulties controlling impulsive behaviors when distressed; lack of emotional awareness; limited access to effective emotion regulation strategies; and lack of emotional clarity. The construct validity of the DERS and its subscales has been demonstrated through its relationship with other self-report measures of emotion regulation, experiential avoidance, self-harm behavior, and intimate partner abuse (Gratz & Roemer, 2004).

Distress tolerance	*Behavioral distress tolerance tasks*. Distress tolerance, defined as the ability to persist in goal directed activity while experiencing affective distress, has repeatedly demonstrated an association with frequency of substance use (Quinn, Brandon, & Copeland, 1996), prospective prediction of substance use outcomes (Brandon et al., 2003; Daughters et al., 2005), and increased rates of comorbid personality disorders (Bornovalova et al, 2008; Daughters et al., 2008). Three versions of the task have been developed, namely the Revised Paced Auditory Serial Addition Task (PASAT-C; Lejuez et al., 2003), the Computerized Mirror-Tracing Persistence Task (see Daughters et al., 2005), and an adolescent version, the Behavioral Indicator of Resiliency to Distress (BIRD; Daughters et al., 2009). All tasks are completed on laptop computers and time of administration ranges from 5 to 12 min. *Distress Tolerance Scale* (DTS; Simons & Gaher, 2005) is a 14-item self report measure of distress tolerance that assesses one's ability to experience and endure negative emotional states using a 5-point Likert-type scale (5 = strongly disagree, 1 = strongly agree). This scale has good psychometric properties, including high internal consistency ($\alpha = 0.89$) and appropriate convergence with other self-report ratings of affective distress and regulation (Simons & Gaher, 2005). In addition, the DTS has demonstrated adequate 6-month test–retest retest reliability ($r = 0.61$; Simons & Gaher, 2005). The scale has four factors, including appraisal (e.g., "Being distressed or upset is always a major ordeal for me"), tolerance (e.g., "I can't handle feeling distressed or upset"), absorption (e.g., "When I feel distressed or upset, all I can think about is how bad I feel"), and regulation (e.g., "I'll do anything to avoid feeling distressed or upset").
Impulsivity	*Barratt Impulsiveness Scale* (BIS-11; Patton, Stanford, and Barratt, 1995) is a 30-item self-report questionnaire that assesses impulsivity. Research using the BIS has shown relationships between impulsivity and overall levels of drug use (Stanford et al., 1996) and to predict withdrawal severity and treatment dropout (Moeller et al., 2001). The BIS-11 contains three subscales, which have been termed Motor Impulsiveness, Cognitive Impulsiveness, and Nonplanning. Cumulative scores range from 30 (low in trait-impulsivity) to 120 (high in trait-impulsivity). The BIS-11 has been normed on a variety of sample populations, including college students ($M = 63.82$, $SD = 10.17$), inpatient substance abusers ($M = 69.26$, $SD = 10.28$), and prison inmates ($M = 76.30$, $SD = 11.86$). The BIS-11 has been shown to be reliable in both clinical and community samples, with Cronbach's alpha coefficients ranging from 0.79 to 0.83 (Patton et al., 1995). *UPPS Impulsive Behavior Scale* (Whiteside & Lynam, 2001) is a 44-item self-report measure assessing four distinct facets of personality associated with impulsive behavior: urgency, (lack of) premeditation, (lack of) perseverance, and sensation seeking. This scale represents the personality approach to understanding impulsive behavior and is based on a factor analysis of frequently used impulsivity scales. The scale has been found to have good internal consistency as well as divergent and external validity (Whiteside & Lynam, 2001).

(continued)

Table 12.2 (continued)

Frequency, degree of use	
Response inhibition	*Stop/Go Signal Task* (Logan, Schachar, & Tannock, 1997) is a computerized behavioral assessment of an individual's ability to inhibit prepotent responses. Data has suggested that poor response inhibition is a predictor of the initiation of substance use, substance use-related problems, and degree of drug use in adolescence (Nigg et al., 2006). In adult samples, chronic drug users have been shown to be significantly worse at inhibiting behavioral responses than non-drug users, such that they take more time to inhibit a response to a stop signal and have a lower overall probability of inhibited responses (Fillmore & Rush, 2002; Monterosso et al., 2005). In addition to impaired response inhibition as a result of chronic drug use, findings have also demonstrated that response inhibition is impaired during acute drug administration (Fillmore, Rush, & Hays, 2002), which has been shown to increase drug users' risk to engage in impulsive behaviors (e.g., sexual risk-taking), and thus may play a significant role in placing drug users at high risk for HIV. Response inhibition is measured in the Stop/Go task by examining one's behavioral response to a letter presented on a computer screen in terms of latency to respond, accuracy, and overall percentage of inhibited responses; the task typically includes 256 trials and takes approximately 15 min to complete.
Delay discounting	*Delay discounting* (e.g., Kirby & Marakovic, 1996) refers to the degree to which an individual shows preference for small, readily available rewards over larger, delayed rewards. High levels of delay discounting have been found in cocaine users (Coffey et al., 2003) as well as heroin users (Kirby et al., 1999), and are associated with financial, social, and legal negative consequences associated with substance use, as well as increased rates of HIV contraction (Kirby et al., 1999). The measure can either be administered in a self-report paper and pencil format or a computerized version (Kirby & Marakovic, 1996), and significant variation exists as to the number and order of trials presented (Robles & Vargas, 2007). In either format, the task consists of a fixed set of choices between smaller, immediate rewards and larger delayed rewards, and from the responses, an estimate "*k*" is derived to indicate level of delay discounting.

a treatment plan. Table 12.2 measures are divided into three categories based on purpose in order to provide more in-depth information on (a) frequency and degree of drug use, (b) impairment, and (c) assessing comorbid symptoms.

With regards to assessing comorbid symptomatology, including this information can serve to increase understanding of one's substance use, particularly given the prevalence of comorbidities associated with SUDs. As discussed previously, the most common Axis I and II comorbidities include mood and anxiety disorders, schizophrenia-spectrum disorders, and BPD and ASPD. Thus, in considering which tools to utilize to assess symptomatology, self-report scales related to common symptoms and underlying psychological and behavioral constructs related to these comorbidities (e.g., emotion regulation, distress tolerance, impulsivity) can be a logical starting point.

However, it is first important to ensure that the intoxication or withdrawal effects of substance use are not accounting for the presence of symptomatology. This can be a significant challenge in diagnostic work with chronic substance users given the resemblance of intoxication states and withdrawal symptoms to certain psychological symptoms. The Psychiatric Research Interview for Substance and Mental Disorders (PRISM-IV) is an example of a diagnostic tool developed to meet this need (Hasin et al., 1996, 2006). It can be utilized to supplement DSM-IV guidelines when distinguishing between primary and substance-induced disorders. The substance use modules of the PRISM-IV precede other diagnostic modules so that the interviewer is able to place other disorders appropriately in the context of one's substance use history to enable assessment of primary and substance-induced psychiatric disorders. More detailed information about the PRISM-IV is provided later.

Assessing treatment response using multiple methods enables a comprehensive assessment of progress throughout treatment. Based on treatment setting, different types of outcomes are important. Generally, the reduction of substance use or abstinence is the main outcome, particularly in substance use treatment programs. As discussed previously, assessing impairment, functioning, as well as remission of comorbid psychopathology can also be important outcomes to consider, particularly in mental health treatment or other therapeutic settings. Measures of frequency, degree of use, and impairment that are often used to establish a treatment plan can also be used to assess treatment response. In addition, measures used to diagnose SUDs and comorbid psychopathology, both categorically and dimensionally, can also be used to assess outcomes.

Further, particularly in substance use treatment and correctional facilities, biological assessments can be used to determine drug use outcomes, such as urinalysis, blood, saliva, or hair samples. Urinalysis has been the most common method to detect illicit drug use, mainly because it is inexpensive and may be acquired in a minimally invasive manner. However, urine is limited in its ability to detect drugs for longer term follow-up periods (it is most accurate to detect use in the previous 3 days) and results can easily be affected by chemicals (bleach, vinegar) or other medications. As an alternative, blood collection has been used and is considered an ideal method for assessing quantitative levels when accuracy is the primary criterion for measure selection. However, blood often is not collected due to its invasive nature, reliance on trained personnel, and the potential risks of spreading infections such as HIV and hepatitis. Saliva has been used as a substitute for blood, as drug concentration levels are comparable. Saliva collection has the advantage of being easy to obtain and cost effective. Drawbacks include difficulty in collecting an adequate amount for drug detection, and the possible contamination of the oral cavity as a result of oral, intranasal, and smoking drug use. Hair testing has been the most recently developed method to detect drug use and is theorized to have the potential benefits of drug detection over a longer period of time. For more details on the recent methods in using hair testing to detect drug use, the interested reader is referred to Kintz, 2006. For a more in-depth description of the strengths and weaknesses of biological methods, please refer to Wolff et al., 1999 for a comprehensive review.

12.5 Standardized Interview Formats

A number of standardized interviews are available to use for diagnostic assessment in both research and clinical settings, with advantages and disadvantages inherent in each instrument with regard to administration, cost, and interviewer qualification and training requirements. As such, we highlight a wide range of diagnostic instruments differing on length, specificity, training needed for administration, and purpose. For a more detailed critique of assessments listed below (SCID-I, SDSS, DIS-IV, CIDI-3), we recommend a recent review by Forman, Svikis, Montoya, and Blaine (2004), which evaluated the most widely used diagnostic instruments for SUDs to determine the most pragmatic and scientifically sound instrument. The most pragmatic instrument often depends on the setting in which it is administered, as well as the purposes of the assessment.

As mentioned previously, the PRISM is a semistructured interview designed to address the poor reliability and validity found for psychiatric diagnoses among substance abusers (Bryant et al., 1992; Kranzler et al., 1995; Williams et al., 1992). In particular, the PRISM-IV is a valuable tool to distinguish primary DSM-IV diagnoses from substance-induced disorders, notably symptoms like depression, anxiety, and psychosis, which are also often prevalent symptoms of withdrawal. Primary disorders are diagnosed when symptoms persist at least 4 weeks in the absence of heavy substance use or when symptoms precede the onset of heavy use. For a PRISM-IV substance-induced diagnosis, a primary episode must be ruled out and the symptoms must exceed the expected effects of intoxication or withdrawal. The PRISM-IV provides guidelines regarding common intoxication and withdrawal effects to aid the interviewer in classifying substance-induced disorders. For example, to distinguish depressive effects of withdrawal from substance-induced depression, the interviewer often utilizes a client's nondepressed time while using substances as a reference point. If depression-related symptoms while using begin or increase in intensity with the onset of depressed mood, these are considered part of substance-induced depression. If symptoms do not change during nondepressed vs. depressed periods of heavy substance use, these are not considered symptoms of substance-induced depression. The PRISM-IV has demonstrated good to excellent test–retest reliability for diagnoses (Hasin et al., 2006; Nunes et al., 2006).

Although time consuming and rarely implemented in treatment settings, the *Structured Clinical Interview for DSM-IV* (SCID-I; First, Spitzer, Gibbon, & Williams, 1997) provides a precise method for identifying substance dependence and abuse psychiatric comorbidities and is the most frequently used instrument in clinical trials. In addition to guidelines for general substance dependence and abuse, the interview assesses for dependence and abuse of 11 classes of drugs including alcohol, amphetamines, caffeine, cannabis, cocaine, hallucinogens, inhalants, nicotine, opioids, phencyclidine (PCP), sedatives, hypnotics, and anxiolytics. Additionally, the interviewer can use the SCID-I to determine a diagnostic assessment of Axis I comorbidities. The SCID-I has demonstrated good reliability and validity in clinical research studies. It typically requires 20–30 min to administer the substance use module. Computer programs are available for data entry, and scoring and training for clinicians typically requires 2–3 days.

The *Substance Dependence Severity Scale* (SDSS; Miele et al., 2000) is a semi-structured, clinician-administered interview that assesses DSM-IV dependence and abuse as well as ICD-10 harmful use. The SDSS is unique in that it assesses both the frequency and severity of symptoms. For each symptom, the SDSS assesses total number of days a symptom occurred, severity of the symptom, and worst severity of the symptom over a 30-day time frame. In contrast, other measures are limited in that they assess only one substance (e.g., alcohol or opiates) or one dimension, such as how often a symptom occurred or how intense or severe a symptom was. In studies of substance abusers, the test–retest reliability and internal consistency of the SDSS have ranged from good to excellent across drug classes. It can be administered by a clinician in 30–45 min and typically requires 2–3 days of training.

The *Diagnostic Interview Schedule for DSM-IV* (DIS-IV; Robins, Helzer & Croughan, 1981) is a fully structured interview that assesses for the presence DSM-IV lifetime and past 12-month history of substance abuse and dependence. In addition to providing a categorical diagnosis, the DIS also utilizes symptom counts to capture a dimensional picture of disorders. The DIS-IV has demonstrated good reliability and validity and can be administered by a lay interviewer, which greatly reduces training and supervision costs. The interview itself takes 15–25 min. A computerized version is also available.

The *Composite International Diagnostic Interview-Third Edition* (CIDI-3; Kessler & Ustun, 2004) Substance Abuse Module (SAM) is a fully structured interview that provides lifetime diagnoses for past and current SUDs according to both the DSM-IV and ICD-10. To supplement categorical diagnosis, the CIDI-SAM also provides a quantitative score, which is created by adding endorsed criteria within and across substances, thus representing a tool that can be used categorically and dimensionally. An SUD diagnosis from the CIDI has demonstrated good reliability and validity and can be administered by a lay interviewer in approximately 20–30 min.

Computerized and paper and pencil versions are also available, as is data entry and scoring software. Kessler and colleagues (2006) have also published work to develop a short-form (SF) of the CIDI. The full set of CIDI-SF scales have been shown to be administered in an average of 7 min, compared to over an hour for the full CIDI. Results show excellent accuracy using the SF version. Thus, in a more time-pressed setting, such as primary care, the SF version may be useful.

The *Semistructured Assessment for Drug Dependence and Alcoholism* (SSADDA; Pierucci-Lagha et al., 2005, 2007) is a diagnostic instrument that was developed for studies of the genetics of substance use and associated disorders. The SSADDA provides more detailed coverage of specific drug use disorders, particularly cocaine and opioid dependence, including the physical, psychological, social, and psychiatric manifestations of substance abuse and dependence, as well as other psychiatric disorders in adults. A computerized version of the SSADDA was developed to permit direct entry of subject responses by the interviewer, and thus it can be administered by a trained nonclinician. The SSADDA yields reliable diagnoses (using the DSM-IV) for a variety of psychiatric disorders, including alcohol and drug dependence. Although developed for use in genetic studies, its broad and detailed coverage of disorders and its computer-assisted format allow it to be used in a variety of applications requiring careful diagnostic assessment (Pierucci-Lagha et al., 2005, 2007).

12.6 Impact of Race, Culture, Diversity, and Age

There has historically existed a striking absence of empirical attention to ethnic and gender differences among individuals with SUDs. To address this issue, greater attention and funding has been allocated to research on the distinct problems faced by underserved populations. These groups in particular, as well as early-onset substance users, face unique challenges due to differing psychological effects of drugs and differing environments for drug use. The following section attempts to provide an overview of the unique challenges experienced by women, minorities, and children with SUDs, as well as future directions for addressing these challenges.

12.6.1 Race and Ethnicity

Rates of substance use and engagement in health risk behaviors have been shown to be more prevalent in ethnic minority populations. Specifically, illicit drug abuse or dependence in the past year among persons aged 12 or older in 2007 was highest among persons reporting two or more races (5.1%), followed by Native Americans (4.0%), African Americans (3.7%), Pacific Islanders (3.6%), Caucasians (2.7%), and Hispanics (2.5%) (SAMHSA, 2008). Ethnic and racial minorities have been shown to face heightened risk factors that may lead to drug use, as well as risk behaviors associated with drug use. In particular, ethnic/racial minorities who reside in inner-city areas often face a heightened vulnerability to drug use and risky sexual behavior (RSB) as a result of higher levels of poverty, violence, general risk practices, and availability of street drugs. Mechanisms such as the exchange of sex for drugs or money, frequent sexual contact within a population at an elevated risk for seropositivity (i.e., IV drug users), and engagement in RSB as a result of drug use play a potent role in the spread of HIV/AIDS among minority drug users (e.g., Avants et al., 2003).

Beyond risk factors, treatment outcome studies have shown that ethnic and racial minorities may be less likely to complete and/or seek treatment, receive fewer treatment services, and are less likely to achieve recovery (Longshore et al., 2004; Schiff & Terry, 1997). The reasons for ethnic disparities in treatment outcomes remain unclear. Treatment modality may account for some of the variance. Lundgren, Amodeo, Ferguson, and Davis (2001) found that different racial and ethnic groups enter different types of drug treatment; specifically, Latino drug users were a third less likely than Caucasian drug users to enter residential treatment, and African American drug users were half as likely as Caucasian drug users to enter methadone maintenance treatment. Beyond treatment-level factors, it is also worthwhile to note that many of the studies investigating either race or ethnic differences in drug treatment do not experimentally or statistically control for correlated factors. Specifically, racial/ethnic minority status is highly correlated with urban residence, poverty, unemployment, low occupational status, and low educational attainment (Al-Issa, 1997). As such, it remains difficult to determine whether race/ethnicity is the key factor responsible for differential treatment outcomes.

High rates of trauma could also potentially account for the disparities in treatment outcomes. In fact, several studies report ethnic differences in exposure to trauma and violence as well as symptoms of posttraumatic stress disorder (PTSD; Dansky et al., 1996; Farley et al., 2004), such that non-Caucasian participants report more trauma and PTSD symptoms than Caucasian participants, which is noteworthy given that severity of exposure to trauma and violence is associated with relapse to substance uses (Farley et al., 2004). Additional research is needed to clarify whether underlying factors account for ethnic differences in treatment outcome. Regardless, an incorporation of these underlying factors in diagnostic assessment of SUDs may inform treatment planning and improve treatment outcomes across racial/ethnic minority groups.

12.6.2 Gender Differences

Research has demonstrated that women differ significantly from men in terms of their pathways into drug addiction. Research suggests an approximately equal age of drug use onset between men and women (Holdcraft & Iacono, 2004). However, although women are less likely than men to be substance abusers, they become dependent at a quicker rate and experience more severe consequences of drug use over shorter periods of time (Hser et al., 2004). Upon treatment entry, women's substance use severity symptoms are equivalent to that of men, despite fewer years and quantities of use (Hernandez-Avila et al., 2004). The reasons for this "telescoping" effect are not clear, but higher rates of psychiatric comorbidity may be the most likely variable to account for the poorer outcomes among women. Specifically, substance-using women suffer from higher rates and different types of psychiatric comorbidity compared to male substance users, with rates of psychiatric comorbidity in women with SUDs estimated to be at least 20% greater than in men (Kessler et al., 1997). Data indicates a self-medication pathway for women whereby comorbid diagnoses more often precede the substance-related disorder in women, whereas the opposite pattern is seen with men. Specifically, compared to men, women suffering from SUDs report a higher rate of anxiety and mood disorders (Brooner, King, Kidorf, Schmidt, & Bigelow, 1997), PTSD and childhood trauma (Pirard et al., 2005; Cottler, Nishith, & Compton, 2001), and BPD (Trull et al., 2000).

Gender differences have also been documented when investigating substance use treatment entry, as well as short- and long-term response. Women are less likely to enter treatment than men (Brady & Ashley, 2005) and women differ from men in their response to treatment. Studies have shown that women are more likely than men to drop out of substance abuse treatment and more likely to relapse after treatment discharge (Bride, 2001; Petry & Bickel, 2000). However, data on this topic have been conflicting, and a more complex interaction of gender and treatment modality has been suggested (e.g., McCaul, Svikis, & Moore, 2001). The effects of gender may be partially explained by more basic underlying processes. As noted above, women presenting with an SUD are also more likely to have a co-occurring psychiatric disorder. As a result, the effect of gender on treatment entry may be accounted for by the fact that women may seek out treatment for mental health problems rather than the co-occurring substance use, whereas men do the opposite (Schober & Annis, 1996). Similarly, treatment retention and outcomes might be explained by the higher rates of comorbidity in women, as psychiatric comorbidity is strongly associated with treatment retention and posttreatment abstinence (Green et al., 2002). In a series of studies, Greenfield et al. (1998, 2002) found no gender differences in substance use treatment outcomes. However, among women, co-occurring MDD and a history of sexual abuse predicted outcomes. Several studies suggest that among women, trauma and its associated symptoms moderate treatment outcomes (Morrissey et al., 2005). Thus, assessment of comorbidity, particularly depression and trauma-related psychopathology, at the start of treatment may be a useful tool to identify individuals at high risk for treatment dropout and relapse.

12.6.3 Age

A great deal of literature has examined the relationship of age of substance use onset and later mental health. Retrospective and longitudinal studies have consistently demonstrated that early initiation of substance use (generally defined as prior to age 15) is related to a host of problems in adulthood. Early-onset substance use is associated with a rapid escalation of substance use-related problems when compared to late-onset substance use (Fergusson & Horwood, 2002; Taylor, Malone, Iacono, & McGue, 2002), as well as higher rates of psychiatric comorbidity (Taylor et al., 2002) and other health-risk behaviors such as unemployment and school dropout (Fergusson & Horwood, 2002). In part, this association is accounted for by underlying personality constructs. A number of studies suggest that the latent factor of behavioral disinhibition/undercontrol is predictive of early-onset substance use and misuse (Carlson, McLarnon, & Iacono, 2007). This analysis is supported by the high association between childhood disruptive disorders (e.g., attention-deficit hyperactive disorder; conduct disorder) and early age of onset (Tarter et al., 2003; Molina & Pelham, 2003). A salient example of this line of research, found that behavioral undercontrol predicted having tried alcohol, nicotine and cannabis by age 14 as well as regular and advanced experience with these substances. As such, understanding vulnerabilities for early-onset substance use is an important component of the assessment for risk for SUDs across age groups, and perhaps drug use assessment would benefit from an adjunct assessment of disinhibition/undercontrol to be used in treatment planning, such as the Balloon Analogue Risk Task (Lejuez et al., 2002), the Stop/Go Signal Task (Logan, Schachar, & Tannock, 1997), or the Iowa Gambling Task (Bechara, Damasio, Damasio, & Anderson, 1994).

12.7 Information Critical to Making a Diagnosis

Beyond obtaining the necessary information to make a categorical diagnosis of drug abuse or dependence using DSM-IV-TR or ICD-10 criteria, additional information is needed to develop a comprehensive, multidimensional diagnosis. For instance, a more detailed self-report assessment of one's frequency and degree of use across specific drug classes and associated impairment can provide a more detailed clinical picture to supplement a categorical diagnosis, and this also facilitates the development of an individualized treatment plan. Further, the inclusion of comorbid psychopathology as part of a drug abuse or dependence diagnosis is crucial. This approach can be taken categorically or dimensionally based on the purpose of the assessment. Regardless, the understanding of psychological symptomatology that may be fueling one's addiction is a necessary component of a drug-related diagnosis.

Diagnostic work in comorbid substance using populations can be a challenge for numerous reasons, mainly due to the resemblance of intoxication states and withdrawal symptoms to certain psychological symptoms. An accurate diagnosis should be able to differentiate psychological symptoms that (a) are merely effects of intoxication or withdrawal, (b) occur exclusively in the context of active substance use, or (c) are independent from substance use (Hasin et al., 2006). In sum, including specific symptomatology related to substance use and psychological comorbidity is a necessary inclusion for SUD diagnosis given the prevalence of comorbid psychopathology among substance users. However, this is not met without a challenge given the parallels and interdependencies of symptomatology related to one's SUD and comorbid conditions. As mentioned earlier, the PRISM-IV is a useful tool to guide clinicians in distinguishing primary and substance-induced disorders that may exist in conjunction with SUDs, particularly in order to gain an understanding of the function of one's substance use, emotional triggers that may contribute to relapse, as well as the consequences and impairment associated with one's use.

12.8 Dos and Don'ts

12.8.1 Do

- Supplement a categorical diagnosis with self-report information on frequency and degree of drug use, use of specific drug classes, as well as degree of associated social, occupational, physical, and psychological impairment.
- Incorporate an assessment of comorbid psychopathology into diagnostic assessment of drug abuse or dependence, both diagnostically as well as symptom-based.
- Once specific symptoms are established, consider *how* these symptoms may be fueling one's addiction (e.g., functional analysis techniques) and how to develop an individualized treatment plan based on this information.

12.8.2 Don't

- Solely rely on a categorical assessment of substance use when attempting to develop an individualized treatment plan.
- Ignore psychological comorbidities that may seem secondary, but actually may be primary in one's treatment for addiction.
- Take a uniform approach to diagnosis and fail to consider which tools may be most appropriate for a particular setting, client, or diagnostic purpose.
- Rely on a narrow range of measures to assess a given symptom or diagnosis.

12.9 Summary

Diagnostic assessment of drug abuse or dependence has different purposes depending on one's stage of treatment and may include screening for drug use at the onset of treatment, making an official diagnosis, utilizing the diagnosis to guide treatment planning, as well as assessing treatment response once treatment has been initiated. At each stage of assessment, a diagnosis would be aided by the inclusion of a more in-depth dimensional assessment of symptomatology rather than relying solely on a categorical classification of dependence or abuse. At the stage of screening, incorporating a dimensional approach to a categorical screening of drug use can include more information on one's frequency and degree of use, as well as associated impairment. At the stage of diagnosis, a dimensional approach requires obtaining information on specific drug and psychiatric symptoms, which can then be useful in treatment planning. An individualized treatment plan incorporating such information can target comorbid psychopathology in conjunction with drug treatment, including the function of substance use in relation to comorbid symptoms, associated impairment, and potential relapse triggers. Finally, using these same considerations to assess treatment response may improve outcomes, as clinicians will be able to alter one's treatment plan accordingly. In this chapter we present the benefits of including dimensional diagnostic considerations into the assessment of drug use and dependence as a supplement to categorical diagnosis in treatment settings. Recent recommendations related to the development of the DSM-V (Nunes & Rounsaville, 2006) suggest that etiological relationships between psychiatric and SUDs must be at the focal point of research and practice moving forward. Identifying the common and shared symptoms of these disorders will be crucial not only in improving our skills in diagnosing SUDs and related comorbidities, but also in advancing our field to move beyond clinical diagnoses toward "a more basic understanding of psychopathology" (Nunes & Rounsaville, 2006).

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Chapter 13
Sexual Dysfunctions and Deviations

Caroline F. Pukall, Marta Meana, and Yolanda Fernandez

13.1 Description of the Disorders

13.1.1 Sexual Dysfunctions

According to the most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association [APA], 2000), sexual dysfunctions are characterized by disturbances in the psychophysiological processes that characterize the sexual response cycle or by pain associated with sexual intercourse. The sexual response cycle, as defined by the DSM-IV-TR, is divided into four phases: (1) desire, which consists of fantasies about and the wish to have sexual activity; (2) excitement, which manifests as a subjective sense of sexual pleasure and associated physiological changes (e.g., vaginal lubrication and expansion in females, penile tumescence and erection in males); (3) orgasm, which reflects the peak of sexual activity and consists of the release of sexual tension and the rhythmic contraction of the perineal/anal sphincter muscles and reproductive organs; and (4) resolution, which indicates a sense of muscular relaxation and general well-being.

The first three stages of the sexual response cycle (desire, excitement, and orgasm) form the basis for most of the sexual dysfunctions as defined by the DSM-IV-TR. Although there are no dysfunctions associated with the resolution phase, the sexual pain disorders category contains a description of two disorders

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that can potentially interfere with sexual functioning in general. Clinically, it is apparent that there is a high comorbidity among the sexual dysfunctions such that a problem at any one stage of the sexual response cycle is likely to lead to difficulties with other stages. For example, a patient presenting with erectile difficulties may also experience problems with orgasm and desire. However, sound empirical data on comorbidities are lacking (Meana, Binik, & Thaler, 2008). The DSM-IV-TR states that when more than one sexual dysfunction is present, all should be recorded (APA, 2000).

In total, there are nine sexual dysfunctions (see Table 13.1), all of which are deemed diagnosable only when the problem is persistent and associated with significant distress (APA, 2000). This point is important to note, as sexual complaints are ubiquitous in our society. General prevalence rates for sexual complaints in the USA are estimated to be 43% in women and 31% in men (Laumann, Paik, & Rosen, 1999). However, when chronicity and distress are taken into account, prevalence rates drop substantially (Hayes, 2009). The DSM-IV-TR further classifies sexual dysfunctions as (1) generalized or situational, (2) lifelong or acquired, and (3) due to psychological or combined factors (APA, 2000). The latter categorization has led to considerable debate in the field, as etiology is not a simple issue to determine. Considering that sexual response involves activity in the central and peripheral nervous systems, it is likely that every sexual problem originates from and/or is perpetuated by both psychological and physiological factors (Meana et al., 2008).

Sexual desire disorders include hypoactive sexual desire disorder (HSDD) and sexual aversion disorder (SAD) for men and women. HSDD is defined as an absence or deficiency of sexual fantasies and desire for sexual activity. It is the most common presenting problem in couples seeking help for sexual difficulties, and it is more much more prevalent in women than in men (Segraves & Segraves, 2001), affecting 22% of women and 5% of men (Laumann et al., 1999). Individuals with SAD experience extreme aversion to sexual activity and avoid genital contact with a partner. The prevalence of SAD is unknown, but it is believed to be rare and more common in women than in men (Meana et al., 2008).

Table 13.1 DSM-IV-TR sexual dysfunctions according to sexual response cycle phase (or sexual pain) and gender

Sexual response cycle phase affected, or sexual pain	Men	Women
Desire	Hypoactive sexual desire disorder	Hypoactive sexual desire disorder
	Sexual aversion disorder	Sexual aversion disorder
Excitement	Male erectile disorder	Female sexual arousal disorder
Orgasm	Male orgasmic disorder	Female orgasmic disorder
	Premature ejaculation	
Pain	Dyspareunia	Dyspareunia
		Vaginismus

Adapted from the American Psychiatric Association (2000)

Disorders of sexual excitement consist of male erectile disorder (ED) and female sexual arousal disorder (FSAD). Men with ED present with a persistent or recurrent, partial or complete inability to attain or maintain an erection sufficient for penetration. Approximately 5% of men under the age of 60 experience erectile difficulties (Laumann et al., 1999). FSAD is characterized by the persistent or recurrent inability to attain or maintain an adequate lubrication-swelling response of sexual excitement during sexual activity, and it affects approximately 14% of women under the age of 60 (Laumann et al., 1999).

Orgasmic disorders consist of female orgasmic disorder (FOD), male orgasmic disorder (MOD), and premature ejaculation (PE). The hallmark sign of FOD and MOD is the persistent and recurrent delay in, or absence of, orgasm following a normal sexual excitement phase. With respect to FOD, the DSM-IV-TR states that because of the wide variability in the type and/or intensity of stimulation that triggers orgasm in women, a clinician must judge whether her capacity for orgasm is less than what would be expected for her age, sexual experience level, and the adequacy of stimulation received. Laumann et al. (1999) reported a prevalence rate of 24% for FOD. For MOD, the clinician must also take into account the man's age and the adequacy of sexual activity in terms of its focus, intensity, and duration. Richardson, Nalabanda, and Goldmeier (2006) reported a range of prevalence rates for MOD between 0 and 8%, with significantly higher estimates in gay samples (i.e., 20–39%). The higher prevalence rate in gay samples has been theorized to be due to an artifact of gay men having more sexual partners and more sexual activity than heterosexual men (Rosser, Metz, Bockting, & Buroker, 1997).

PE is the most common male sexual dysfunction, with a prevalence rate of 29% (Laumann et al., 1999). PE is defined as a persistent or recurrent ejaculation with minimal sexual stimulation before, on, or shortly after penetration and before the person wishes it. Again, it is for the clinician to decide whether the conditions described are adequate for most men to delay ejaculation until desired. It has been suggested in the literature that an intravaginal ejaculatory latency time (IELT, measured by a stopwatch) of less than 1 min is appropriate for a diagnosis of "definite" PE and an IELT of 1–1.5 min for "probable" PE (Waldinger, Zwinderman, Berend, & Schweitzer, 2005).

The sexual pain disorders category consists of dyspareunia for women and men and vaginismus for women. Dyspareunia is described as recurrent or persistent genital pain associated with sexual intercourse that is not caused exclusively by vaginismus (see below) or lack of lubrication. The prevalence rate of dyspareunia is 14% for women and 3% for men (Laumann et al., 1999), although a higher lifetime prevalence rate (61%) has been reported in men who engage in receptive anal intercourse (Rosser et al., 1997). Vaginismus is defined as a recurrent or persistent involuntary spasm of the musculature of the outer third of the vagina that interferes with sexual intercourse. Population-based estimates of 1% or less (Fugl-Meyer & Sjogren Fugl-Meyer, 1999) indicate that vaginismus is a relatively uncommon sexual dysfunction, although clinic-based referral estimates are higher (5–17%; Reissing, 2009).

13.1.2 Paraphilias

Paraphilias are characterized by recurrent and persistent intense sexually arousing fantasies, sexual urges, or behaviors generally involving nonhuman objects, the suffering or humiliation of oneself or one's partner, or children or other nonconsenting persons (APA, 2000). In general, the focus of the person's sexual thoughts, fantasies, urges, behaviors, and arousal is not targeted to sexually mature humans; in cases in which these activities are targeted to mature humans, they are considered to be highly unusual (Seto, Abramowitz, & Barbaree, 2008). For some individuals, paraphilic fantasies or stimuli are required for erotic arousal and are always present in sexual activity. In other cases, the person can function sexually without paraphilic fantasies or stimuli some of the time, but the paraphilic preferences may arise episodically (e.g., during times of stress; APA, 2000).

There are eight paraphilias, all of which involve recurrent, intense sexually arousing fantasies, sexual urges, or behaviors for at least 6 months: exhibitionism, fetishism, frotteurism, pedophilia, sexual masochism, sexual sadism, transvestic fetishism, and voyeurism. Exhibitionism is characterized by the exposure of one's genitals to an unsuspecting stranger, fetishism by the use of nonliving objects (e.g., female undergarments), frotteurism by touching and rubbing up against a nonconsenting person, pedophilia by sexual activity with a prepubescent child or children, sexual masochism by the act (real, not simulated) of being humiliated, beaten, bound, or otherwise made to suffer, sexual sadism by acts (real, not simulated) in which the psychological or physical suffering (including humiliation) of the victim is sexually exciting to the person, transvestic fetishism by cross-dressing (in heterosexual males only), and voyeurism by the act of observing an unsuspecting person who is naked, in the process of disrobing or in the process of engaging in sexual activity (APA, 2000).

For exhibitionism, frotteurism, pedophilia, and voyeurism, the diagnosis is made if the person has acted on these urges or the urges or sexual fantasies cause marked distress or interpersonal difficulty. For sexual sadism, the diagnosis is made if the person has acted on these urges with a nonconsenting person or the urges, sexual fantasies, or behaviors cause marked distress or interpersonal difficulty. For the remaining paraphilias, the diagnosis is made if the behavior, sexual urges, or fantasies cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (APA, 2000). With the exception of sexual masochism in which the gender ratio is estimated to be 20 males for each female, the other paraphilias are almost never diagnosed in women. There are no definitive prevalence rates for the paraphilias (Seto et al., 2008), although some evidence suggests that paraphilic behaviors commonly co-occur in the same individual (e.g., Smallbone & Wortley, 2004).

13.1.3 Gender Identity Disorder

Gender identity disorder (GID) involves a strong and persistent cross-gender identification over and above that of merely exhibiting cross-gender identification for any perceived cultural advantage (APA, 2000). In children, the disturbance is manifested by at least four of the following: (1) a repeatedly stated desire to be, or insistence that he or she is, the other sex; (2) in boys, preference for cross-dressing or simulating female attire; in girls, insistence on wearing only stereotypically masculine clothing; (3) strong and persistent preferences for cross-sex roles in make-believe play or persistent fantasies of being the other sex; (4) an intense desire to participate in the stereotypical games and pastimes of the other sex; and (5) a strong preference for playmates of the other sex. In adolescents and adults, the disturbance is manifested by symptoms such as the stated desire to be the other sex, frequent passing as the other sex, a desire to live or be treated as the other sex, or the conviction that he or she has the typical feelings and reactions of the other sex (APA, 2000). Additionally, a persistent discomfort with his or her sex or sense of inappropriateness in the gender role of that sex must be present. The DSM-IV-TR states that GID can only be diagnosed in the absence of a physical intersex condition and in the presence of clinically significant distress or impairment in social, occupational, or other areas of functioning (APA, 2000).

As GID is an issue of identity rather than sexuality, it will not be further covered in this chapter. The interested reader is referred to the following literature in order to provide the basics and theoretical underpinnings of assessment of GID in children, adolescents, and adults: Lawrence (2008), Zucker (2005), and Zucker and Cohen-Kettenis (2008).

13.2 Procedures for Gathering Information

13.2.1 Sexual Dysfunctions

The clinical interview is the main technique with which to assess and diagnose sexual dysfunctions. There is no widely used, validated, standardized interview as is the case for other Axis I and Axis II disorders. Sexual dysfunctions are not included in the Diagnostic Interview Schedule (DIS; Compton & Cottler, 2004) or the Structured Clinical Interview for DSM-IV Disorders (SCID; First & Gibbon, 2004). However, several authors have proposed clinical interview guidelines and recommendations about coverage of topics and process (e.g., Maurice, 1999; McConaghy, 2003; Meana et al., 2008; Wincze & Carey, 2001).

The clinical interview typically starts with the individual describing the nature of the problem and the reason for seeking treatment. Following an open-ended description of the problem, the clinician may ask more specific questions about the extent of the problem and the conditions under which it may occur. Questions can then be asked about the various biological, psychological, and social problems that might be implicated (Meana et al., 2008). In terms of general biological factors, the clinician should assess and take into account age, general health status (e.g., body mass index), lifestyle factors (e.g., diet, cigarette smoking), hormone levels, chronic pain syndromes (e.g., chronic prostatitis syndrome, vulvodynia), hormone levels, and medical illnesses that affect vascular, sensory, central, and nervous system functions. In addition, questions regarding past surgeries and injuries, especially those in the genital or pelvic region, and past and current medications should be posed (Meana et al., 2008). It is commonly understood that many medications, such as antidepressants, antipsychotics, and antihypertensives, can detrimentally affect sexual desire, arousal, and orgasm.

With respect to individual psychological factors, depression and anxiety are often comorbid with sexual dysfunction. If present and treatment does not target the associated mood disorders, treatment will likely not be successful. Substance abuse disorders may also have a major impact on sexual functioning. Certain maladaptive cognitive sets, unrealistic expectations, misinformation or lack of information, and negative emotional reactions can also impinge upon sexual function. Past sexual trauma and other negative experiences may set the foundation for sexual problems as well (Meana et al., 2008). Socially, family-of-origin attitudes regarding sexuality may be instilled early on and create the conditions necessary for the development of a sexual dysfunction. Assessing the quality of the individual's current relationship is of utmost importance, as problems between the members of the couple may be a cause and/or a consequence of sexual problems. If so, these issues need to be appropriately addressed. Areas of inquiry related to the couple should include anger, distrust, discrepancies in sexual drive, and preferences, communication, and physical attraction (Meana et al., 2008). The comorbidity of partner sexual dysfunction is common and should be assessed and addressed if the partner is willing to be present in the sessions. Lastly, ethnocultural and religious attitudes and beliefs are important as they can be implicated in the development and maintenance of sexual dysfunctions.

Questionnaires can be used to formally assess the presence and/or comorbidity of sexual dysfunctions, and some physiological measures can be used if the clinical setting allows for the collection of the adjunct information (see below). In addition, information from the client's treating physician with respect to results from laboratory tests (e.g., for hormone function, vascular integrity, nerve function) and physical examinations (e.g., gynecological examinations) will provide useful information for treatment.

13.2.2 Paraphilias

Typically, assessments for paraphilias occur in one of two contexts, the first of which is a forensic setting (Seto et al., 2008). In these cases, the suspected paraphilia is associated with criminal conduct and the individual will have criminal charges or convictions for sexual crimes. The main clinical question will be about the presence or absence of paraphilias. If present, the implications of this diagnosis for treatment, management, and the risk of reoffending will become more clear (Seto et al., 2008). The other context involves nonforensic clinical settings in which paraphilias are not usually associated with criminal conduct. In these cases, it is possible to receive a referral for someone who is experiencing significant individual and/or interpersonal distress in response to a paraphilia.

As with the sexual dysfunctions, no validated interviews are available for the paraphilias and the major method with which to obtain information is through the clinical interview. The process and structure for gathering information is similar to that described with respect to the sexual dysfunctions. Briefly, questions are asked about sexual thoughts, interests, and behaviors, and relationship history. In addition, questionnaires may be administered; a behavioral history may be obtained, and methods of viewing time/visual reaction time and phallometry may be used (see below). In addition, file reviews should be conducted in order to gain more information.

13.3 Recommendations for Formal Assessment

13.3.1 Sexual Dysfunctions

Measures exist for virtually every issue related to sexual function, ranging from overall sexual function in a couple to sexual aversion disorder in a woman. Some measures can be applied to men, women, *and* couples whereas others are couple-related or gender- and/or problem-specific.

13.3.1.1 General Sexual Function Measures Applicable to Men, Women, and/or Couples

Two useful measures that focus on global sexual function and are applicable to men, women, *and* couples are the Derogatis Interview for Sexual Functioning (DISF/DISF-R; Derogatis, 1997, 1998) and the Golombok-Rust Inventory of Sexual Satisfaction (GRISS; Rust & Golombok, 1985, 1986, 1998). The DISF is a 26-item interview designed to assess overall sexual function in a multidimensional manner. Five domains are assessed: sexual cognition/fantasy, sexual arousal, sexual behavior/experience, orgasm, and sexual drive/relationship. If self-report as opposed to an interview format is preferred, a 26-item self-report version (DISF-R) is available. Responses are made on 9- and 5-point scales. The DISF and DISF-R have gender-specific versions and yield standard scores that allow comparisons with the normative community sample; however, no clinical norms currently exist. Although this lack of information limits the use of the DISF and DISF-R for the purpose of diagnosis, evidence of discriminant validity exists.

The GRISS is a 56-item questionnaire related to sexual function and relationship quality in heterosexual relationships. Twenty-six items relate to men and 26 to women; all responses are made on 5-point scales. The GRISS yields scores on 5 dimensions for men (i.e., erectile dysfunction, premature ejaculation, nonsensuality, avoidance, and dissatisfaction), 5 for women (i.e., orgasmic difficulties, vaginismus, nonsensuality, avoidance, and dissatisfaction), and 2 common dimensions (i.e., infrequency and noncommunication). Scores on these 12 dimensions are transformed into standardized scores and can be plotted to provide a profile. The GRISS also provides a total score indicative of overall relationship quality and the couple's sexual function.

An additional measure of global sexual function that can be used in men and women is the Derogatis Sexual Functioning Inventory (DSFI; Derogatis & Melisaratos, 1979). The DSFI is a multidimensional measure that consists of 254 items divided into 10 subscales: information, experiences, drive, attitudes, psychological symptoms, affect, gender role definition, fantasy, body image, and sexual satisfaction. Each scale provides a separate score and a linear combination of the 10 scales yields the Sexual Functioning Index. A second global score, the Global Sexual Satisfaction Score, assesses the respondent's subjective perception of his/her sexual function. Response formats range from yes/no items to rating scales.

13.3.1.2 Measures Applicable to Couples and/or to Clients in Relationships Who Present Alone

The Sexual Interaction Survey (SII; LoPiccolo & Steger, 1974; Reinhardt, 1998) assesses sexual function and satisfaction in heterosexual relationships. Unlike most other measures designed for one respondent, the SII requires responses from both members of the couple. One hundred and two items assess 17 heterosexual behaviors in ten subscales, five for men and five for women: frequency dissatisfaction, self-acceptance, pleasure, perceptual accuracy, and mate acceptance, in addition to a total disagreement scale. Responses are made on 6-point scales.

The Dyadic Adjustment Scale (DAS; Spanier, 1976) is the most widely used measure for the assessment of relationship quality. It is a 32-item questionnaire addressing four domains: dyadic consensus, dyadic satisfaction, dyadic cohesion, and affective expression. Responses are made on a variety of scale options, and a total score can also be derived. Total DAS scores have been shown to discriminate between distressed and nondistressed couples and to identify at-risk marriages, and it has been used in same-sex relationships (Kurdek, 1992).

The Index of Sexual Satisfaction (ISS; Hudson, 1998; Hudson, Harrison, & Crossup, 1981) is a 25-item questionnaire of sexual dissatisfaction in an intimate relationship. Originally, responses were made on 5-point scales; however, the more recent version uses 7-point scales. The ISS has a clinical cut-off score of 30 such that scores above this value represent a clinically significant degree of sexual discord in the relationship.

The Sexual Satisfaction Scale for Women (SSS-W; Meston & Trapnell, 2005) is a 30-item measure that addresses sexual satisfaction in women along personal and relational dimensions. It consists of five domains of satisfaction (i.e., communication, compatibility, contentment, relational concern, personal concern). Responses are made on 5-point scales. The SSS-W provides the most comprehensive assessment of satisfaction and can be used with any female client regardless of her presenting complaint. However, there is currently no male version of this questionnaire.

13.3.1.3 Measures Applicable to Women: General Sexual Function

Many more measures exist that focus on gender-specific sexual function. For women, they include the following: Brief Index of Sexual Functioning for Women (BISF-W; Rosen, Taylor, & Leiblum, 1998; Taylor, Rosen, & Leiblum, 1994), Female Sexual Function Index (FSFI; Rosen et al., 2000), McCoy Female Sexuality Questionnaire (MFSQ; McCoy & Matyas, 1998), Sexual Function Questionnaire (SFQ; Quirk, Haughie, & Symonds, 2005), Female Sexual Distress Scale (FSDS; Derogatis, Rosen, Leiblum, Burnett, & Heiman, 2002), and the Structured Diagnostic Method (SDM; Utian et al., 2005).

The BISF-W is 22-item scale developed to measure global sexual function in clinical trials. A scoring algorithm provides an overall sexual function score as well as scores on seven dimensions: thoughts/desire, arousal, frequency of sexual activity, receptivity/initiation, pleasure/orgasm, relationship satisfaction, and problems affecting sexual function. Responses are made on a variety of scales ranging from yes/no options to frequency scales.

The FSFI is a 19-item questionnaire of female sexual function. It yields a total score and six subscale scores: desire, arousal, lubrication, orgasm, satisfaction, and pain. Responses are made on 5- or 6-point scales and in reference to the past 4 weeks. Studies have provided evidence that the FSFI is useful as a screening tool or diagnostic aid, but not as a solitary diagnostic measure (Meston, 2003; Weigel, Meston, & Rosen, 2005).

The MFSQ is a 19-item measure that assesses a woman's general level of sexual interest and response in the previous 4 weeks. The first 11 questions focus on general sexual enjoyment, arousal, interest, satisfaction with a partner, and feelings of attractiveness. The remaining questions relate to intercourse frequency and enjoyment, orgasm frequency and pleasure, lubrication, pain with intercourse, and the impact of the partner's erectile difficulties.

The SFQ is a 34-item questionnaire that assesses multiple dimensions of female sexual function and satisfaction. The eight dimensions are desire, arousal-sensation, arousal-lubrication, subjective arousal, enjoyment, orgasm, pain, and partner relationship. Responses are geared towards the previous 4 weeks and rated on 4-point scales.

The FSDS measures sexually-related distress in women with, in its most recent form, 12 items that are rated in 4-point scales. Although more independent testing is needed, the FSDS has shown promise with different populations.

The SDM is a method designed to aid health care providers with no background training in sexual dysfunction to diagnose sexual dysfunctions in postmenopausal women. The SDM consists of four self-report measures and a clinical interview. The four questionnaires are administered in the following order: the Life Satisfaction Checklist (LSC; Fugl-Meyer, Lodnert, Branholm, & Fugl-Meyer, 1997), the first seven of the nine questions of the sexual component section of the Medical History Questionnaire (MHQ; Pfeiffer & Davis, 1972), the FSDS (Derogatis et al., 2002), and the SFQ (Quirk et al., 2002) to assess the following: overall life and sexual satisfaction, onset of and decline in sexual function, sexual distress, and sexual function.

The structured interview is based on a guide for diagnostic assessment outlined by Utian et al. (2005). However, there currently is no information from the authors regarding how to combine the results from the various measures and interview for diagnostic purposes.

13.3.1.4 Measures Applicable to Men: General Sexual Function

For men, three measures are commonly used: the Brief Sexual Function Inventory-M (BSFI-M; O'Leary et al., 1995), the International Index of Erectile Function (IIEF; Rosen et al., 1997), and the Male Sexual Health Questionnaire (MSHQ; Rosen et al., 2004).

The BSFI-M is an 11-item questionnaire of male sexual function. It addresses sexual drive, erection, ejaculation, and subjective assessment of drive, erection, and ejaculation in addition to overall satisfaction in heterosexual and same-sex relationships. Responses are made on 5-point scales, and the time period assessed is the preceding 30 days. Although originally developed to provide a multidimensional measure of male sexual function, it appears to be most suitable as a unidimensional tool for general screening purposes (Mykletun, Dahl, O'Leary, & Fossa, 2005).

The IIEF is a 15-item questionnaire that assesses erectile function in men with erectile disorder. Five domains of sexual function are addressed: erectile function, orgasmic function, sexual desire, intercourse, and overall satisfaction. Responses are made on 5- or 6-point scales, and the time period assessed is the previous 4 weeks.

The MSHQ is a 25-item questionnaire that assesses sexual function and satisfaction in aging men with urogenital concerns associated with certain medical conditions (i.e., heart disease, prostate cancer, and benign prostatic hyperplasia/lower urinary tract symptoms). The MSHQ addresses three domains of sexual function: erection, ejaculation, and satisfaction with the sexual relationship in heterosexual or same-sex relationships.

13.3.1.5 Dysfunction-Specific Measures for Men and/or Women

Dysfunction-specific measures can be of clinical use. However, there are relatively fewer such measures than those pertaining to global sexual function, and the measures described below are limited in terms of their diagnostic capability when used alone. As such, these measures should be used in conjunction with the clinical interview. In addition, many measures of global sexual function contain dysfunction-specific questions or subscales, which may provide information on comorbid disorders that might otherwise be missed with dysfunction-specific tools. For example, the FSFI has subscales pertaining to desire, orgasm, arousal, lubrication, pain, and satisfaction, and the IIEF assesses erectile function, orgasmic function, sexual desire, intercourse, and overall satisfaction.

Most HSDD measures pertain to women. The Sexual Interest and Desire Inventory (SIDI-F; Clayton et al., 2006; Sills et al., 2005) is a 13-item, clinician-administered tool designed to quantify the severity of symptoms in premenopausal women diagnosed with HSDD. The SIDI-F contains questions in the following areas: relationship-sexual, receptivity, initiation, desire-frequency, affection, desire-satisfaction, desire-distress, thoughts-positive, erotica, arousal-frequency, arousal-ease, arousal-continuation, and orgasm. Based on the client's responses, the clinician chooses among 4–6 options for most questions. Six of the questions, however, use a grid system that rates intensity and frequency simultaneously, allowing up to 13 possible responses.

In addition, the Profile of Female Sexual Function (PFSF; Derogatis et al., 2004; McHorney et al., 2004) is a 37-item instrument for sexual desire in menopausal women. It addresses seven domains of sexual function: desire, arousal, orgasm, pleasure, sexual concerns, responsiveness, and self-image. Finally, the Menopausal Sexual Interest Questionnaire (MSIQ; Rosen, Lobo, Block, Yang, & Zipfel, 2004) contains ten items assessing sexual function in menopausal women in three domains: desire, responsiveness, and satisfaction.

To assess HSDD in men *and* women, the Sexual Desire Inventory (SDI; Spector, Carey, & Steinberg, 1996) is a 14-item questionnaire of couple and solitary desire that focuses on cognitive aspects of desire. Responses are made on 7- or 8-point scales. A total and two subscale scores (i.e., dyadic desire and solitary desire) can be derived.

Only one measure directly assesses sexual fear and avoidance typical of SAD. The Sexual Aversion Scale (SAS; Katz, Gipson, Kearly, & Kriskovich, 1989; Katz, Gipson, & Turner, 1992) contains 30 items that assess fears and phobic avoidance of sexual contact. Responses are made on 4-point scales.

There are no measures specific to FSAD. Two instruments that offer a detailed assessment of sexual arousal issues in addition to other phases of the sexual response cycle are the FSFI (four questions on arousal and four on lubrication) and the SFQ (eight questions related to arousal). However, physiological measures that assess various changes in the genitals usually employed with rating scales of subjective arousal have been used in the empirical literature (for a review, see Meston, 2000; Prause & Janssen, 2006). Some of these physiological measures focus on changes in vaginal blood volume (e.g., Laan, Everaerd, van der Velde, & Geer, 1995), clitoral blood flow (e.g., Kukkonen et al., 2006), vaginal temperature (e.g., Levin, 2006), vulvar temperature (Kukkonen, Binik, Amsel, & Carrier, 2007), changes in vulvar blood flow (Waxman & Pukall, 2009), and structural changes (Maravilla, 2006). These physiological measures lack validation and are not typically used in clinical settings due to their expense, need for technical training, and other issues (Meana et al., 2008).

A comprehensive assessment of ED consists of a thorough clinical interview, physical examination, and laboratory testing. Specialized diagnostic tests may be indicated in some cases and may include Doppler ultrasounds and nocturnal penile tumescence tests. Although self-report measures can aid in the diagnostic process, they are not sufficient. Measures that explore ED in detail include the BSFI-M, the IIEF, and the IIEF-5 (Rosen, Cappelleri, Smith, Lipsky, & Pena, 1999). The latter consists of five items from the IIEF that measures erectile function and intercourse satisfaction in the last 6 months. Responses are made on 5-point scales.

The clinical interview remains the best diagnostic tool for FOD (Meana et al., 2008). The Orgasm Rating Scale (ORS; Mah & Binik, 2002) assesses cognitive-affective and sensory components of orgasm in men and women but is not a measure of anorgasmia. MOD may be best assessed with the MSHQ, which contains seven questions on ejaculation (occurrence, delay, volume, force, pain/discomfort, pleasure, retrograde ejaculation).

The diagnosis of PE relies on objective measurement in addition to client distress; however, most clinicians do not use IELT cutoff points when assessing PE. Assessment typically relies on clinical impression and client distress from the clinical interview (Perelman, 2006). There are no measures that specifically address PE.

As the primary complaint of women with sexual pain disorders is difficulty with vaginal penetration, a recently published questionnaire may be of use in assessing cognitions related to vaginal penetration. The Vaginal Penetration Cognition Questionnaire (VPCQ; Klaassen & ter Kuile, 2009) consists of 40 items scored on 7-point scales. Factor analysis revealed five subscales: control cognitions, catastrophic and pain cognitions, self-image cognitions, positive cognitions, and genital incompatibility cognitions. The VPCQ subscales demonstrated good discriminant validity; all five subscales detected differences between women with and without sexual pain disorders, and the four subscales related to negative cognitions differentiated between women with vaginismus and dyspareunia. Specifically, women with vaginismus reported lower levels of perceived control over penetration and higher levels of catastrophic and pain cognitions, negative self-image cognitions, and genital incompatibility cognitions than women with dyspareunia. As this measure is new, it remains to be tested further but offers a promising avenue for the assessment of thoughts related to sexual pain.

To comprehensively assess the sexual pain disorders (dyspareunia and vaginismus), a clinician must be knowledgeable in the evaluation of sexual dysfunctions *and* pain (Meana et al., 2008). Many sexual measures assess dyspareunia with a single or a few items (e.g., GRISS, MFSQ, SFQ, FSFI), and the incorporation of pain measures is highly recommended. For example, the McGill Pain Questionnaire (MPQ; Melzack, 1975), pain rating scales (Pukall, Meana, & Sutton, 2009), the Pain Catastrophizing Scale (PCS; Sullivan, Bishop, & Pivik, 1995), and pain diaries (Payne, Bergeron, Khalifé, & Binik, 2006) have been found to be useful in assessing pain intensity, cognitions, and patterns. The clinical interview for dyspareunia should contain questions on the history, onset, location, quality, duration, and intensity of the pain in addition to the impact of the pain on sexual activities, relationship adjustment, and psychological functioning (Meana et al., 2008; Pukall et al., 2009; Smith, Pukall, & Boyer, 2009). The value of a physical examination that includes the cotton-swab test cannot be underestimated (Goldstein & Pukall, 2009a, 2009b), and when relevant, standardized tools can be used to assess pain threshold changes in response to treatment (for a review, see Pukall et al., 2009).

13.3.2 Paraphilias

In addition to the clinical interview for paraphilias, questionnaires may be administered, a behavioral history may be obtained, and methods of viewing time and phallometry may be used. Although the clinical interview is the main method of gathering information from a client, some may be reluctant to disclose information about sexual attraction to children, for example, in a face-to-face interview. One way in which to reduce reluctance is to administer questionnaires.

13.3.2.1 Questionnaires

The Multiphasic Sex Inventory (MSI; Nichols & Molinder, 1984) contains 300 true/false items organized into 20 scales, which tap into different aspects of conventional and paraphilic sexual behaviors. The MSI is available in two forms, one for adults (MSI) and one for adolescents (12–19 years of age, MSI J; Nichols & Molinder, 1986). The MSIs include six validity scales and a scale assessing attitudes toward treatment. This questionnaire can distinguish between types or subgroups of sex offenders (e.g., Craig, Browne, Beech, & Stringer, 2006). Although a revised version of this measure has been developed (MSI-II; Nichols & Molinder, 2005), sufficient detail regarding its validity is not yet available.

The Multidimensional Assessment of Sex and Aggression (MASA; Knight, Prentky, & Cerce, 1994) is a 403-item questionnaire developed to assess adult male sex offenders but it appears to also be useful for adolescent male sex offenders (e.g., Daversa, 2005). Responses are made on a variety of options, ranging from multiple choice questions to frequency scales. The MASA assesses several domains, including antisocial behavior, social competence, anger and aggression, paraphilias, sexual preoccupation and compulsivity, offense planning, sexual attitudes, and pornography use.

The Sexual Interest Cardsort Questionnaire (SICQ; Holland, Zolandek, Abel, Jordan, & Becker, 2000) contains 75 descriptions of sexually explicit acts across 15 categories (e.g., heterosexuality, homosexuality, frotteurism, sadism, masochism) relevant to different paraphilias. Responses with respect to degree of sexual interest are made on 7-point scales for each description (the original measure was a set of cards that were sorted based on preference). Responses on the SICQ are significantly correlated with group classification made by clinicians. Laws, Hanson, Osborn, and Greenbaum (2000) reported that the SICQ can distinguish between offenders of only boys vs. only girls.

The Clarke Sexual History Questionnaire-Revised (SHQ-R; Langevin & Paitich, 2002) was developed for adults (18 years of age and older) and consists of 508 items divided into 23 scales. It also includes validity scales to detect dishonest responses. This questionnaire covers different aspects of conventional and paraphilic sexuality, including early childhood and adolescent experiences, fantasies, exposure to pornography, and sexual dysfunction. Unfortunately, this measure has poor test–retest reliability (Seto et al., 2008).

The Sexual Fantasy Questionnaire (SFQ; Daleidin, Kaufman, Hilliker, & O'Neil, 1998) was developed for adolescents and contains 127 items related to the frequency of particular sexual fantasies. Responses are made on 7-point scales. Two subscales exist: global deviance and global nondeviance. The former includes fantasies related to such activities as whipping, beating, or torturing others and paraphilic activities such as arousal to fire setting and cross-dressing. The latter scale includes fantasies related to activities such as hugging, kissing, and holding hands. The SFQ has not been extensively investigated.

The Wilson Sexual Fantasy Questionnaire (WSFQ; Wilson, 1978) consists of 40 items describing a number of sexual fantasies and associated attitudes and is useful for describing individual patterns of sexual fantasy. Responses are made on 6-point scales, and items are theoretically divided into four fantasy themes: intimate, exploratory, sadistic-masochistic, and impersonal.

13.3.2.2 Measure of Behavioral History for Pedophiles

Clinicians have used information about sexual victim characteristics that are empirically related to pedophilic sexual interests in order to diagnose pedophilia. Among adult sex offenders who victimize children, those who have multiple victims, very young victims, male victims, or victims outside the offender's immediate family are more likely to be pedophilic than those who do not (Seto et al., 2008). In the past, this information was combined from various sources; however, Seto and Lalumière (2001) developed the Screening Scale for Pedophilic Interests (SSPI), a 4-item scale that summarizes an offender's sexual victim characteristics. Its purpose is to identify those offenders who are more likely to be pedophilic in terms of their sexual arousal (penile responses) to depictions of children relative to their responses to depictions of adults. Total SSPI scores range from 0 to 5, as one item (having boy victims) is given twice the weight as the others. These items are scored as present or absent by the clinician using all possible types of information related to sexual offenses. Recent evidence suggests that the SSPI is also valid for adolescent sex offenders (e.g., Seto, Murphy, Page, & Ennis, 2003) and can predict new serious offenses among adult male sex offenders with child victims (Seto, Harris, Rice, & Barbaree, 2004). As the SSPI requires a history of sexual contact with a child, it is not useful when confronted with a possible pedophile who has never acted upon his sexual attraction to children (Seto et al., 2008).

13.3.2.3 Viewing Time

When viewing time to pictures of children and adults is measured unobtrusively, time is correlated with self-reported sexual interests and phallometric responding in samples of nonoffending male volunteers (e.g., Quinsey, Ketsetzis, Earls, & Karamanoukian, 1996). When viewing time to clothed, semiclothed, or nude figures of girls, boys, women, or men is assessed, it is possible to distinguish between adult sex offenders with child victims and other men by the amount of time they spend looking at pictures of children vs. adults (e.g., Harris, Rice, Quinsey, & Chaplin, 1996). Viewing time can also distinguish between sex offenders with boy vs. girl victims (Abel et al., 2004). One measure that can be used to assess preference is the Abel Assessment of Sexual Interest (AASI; Abel, Huffman, Warberg, & Holland, 1998), which includes a viewing time component and a computer-administrated questionnaire.

13.3.2.4 Phallometry

Phallometry involves the measurement of penile responses to stimuli (usually pictures) that vary on specific dimensions of interest (e.g., age, gender) (Seto et al., 2008). Phallometric responses are recorded as increases in either penile circumference or volume, with greater increases associated with greater sexual arousal to the presented stimulus, and they demonstrate significant, positive correlations with viewing time and self-report among nonoffenders (Harris, et al., 1996) and with AASI scores among sex offenders (Letourneau, 2002). For phallometry to be valid, it is important to ensure that penile responses are not being voluntarily controlled to present a more acceptable pattern of responding, as some studies have shown that voluntary control is possible in some men (e.g., Quinsey & Bergersen, 1976). Although there is no generally accepted strategy for controlling voluntary responding, most researchers arrange the testing environment in such a way as to minimize the possibility of faking and utilize care with interpreting results (Malcolm, Davidson, & Marshall, 1985). Phallometric testing demonstrates good discriminative and predictive validity, but low to acceptable reliability (for a review, see Seto et al., 2008).

13.3.2.5 Assessing Antisocial Tendencies

Antisocial tendencies are highly associated with criminal behavior (e.g., Quinsey, Harris, Rice, & Cormier, 2006). Many psychometrically sound measures of antisocial tendencies are available, and they assess factors ranging from antisocial personality traits to associations with criminal peers (for a review, see Seto et al., 2008). Of particular importance is psychopathy, a condition characterized by a lack of empathy or conscience, manipulative behaviors, deceitfulness, and impulsive and irresponsible behavior. One measure that is frequently used is the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). The PCL-R was created to assess people accused or convicted of crimes, and it contains two parts, a semistructured interview and a review of file records and history. During the evaluation, the trained clinician scores 20 items that measure central elements of psychopathic character (i.e., interpersonal relationships, affective involvement, responses to people and situations, evidence of social deviance, and lifestyle). Each item is scored 0, 1, or 2 depending on how well it applies to the person being interviewed.

13.3.2.6 Evaluating Denial

Among sex offenders, denial or minimization of personal responsibility can become an obstacle to effective treatment. There are several scales and measures that assess for this issue, the most popular of which are the scales of the MSI, the Denial and Minimization Checklist (DMC; Barbaree, 1991), and the Facets of Sex Offender Denial Measures (FoSOD; Schneider & Wright, 2001). The DMC has been designed for use with pedophiles with child victims and rapists. It is completed by group therapists after each disclosure of offenses made by men in a therapy program. The clinician indicates whether or not the offender denies the offense and also indicates the appropriate subcategory of denial. The same process occurs for minimization. In addition, the FoSOD is a 65-item questionnaire that is completed by offenders with child victims. Six factors capture distinct aspects of denial (i.e., of the sexual offense, extent, intent, planning, and risk of relapse, and due to perceived victim desire). Responses are made on 4-point scales.

13.3.2.7 Measuring Cognitions Related to Sexual Offending

Individuals with tolerant attitudes toward sexual offending may be more likely to commit sexual offenses (Hanson & Harris, 2000). Although many measures exist, only a handful has been empirically supported. These measures include the following: the Cognitive Distortion and Immaturity scale and Justification scale of the MSI, the Abel and Becker Cognitions Scale (ABCS; Abel, Becker, & Cunningham-Rathner, 1984), and the Bumby MOLEST scale (Bumby, 1996). The MOLEST scale was adapted from the ABCS, and it contains 44 items that are scored on a 4-point scale.

13.3.2.8 Examining Self-Regulation

General and sexual self-regulation difficulties have been identified as risk factors for sexual offending (e.g., Bickley & Beech, 2002). The STABLE-2000, which was originally part of the Sex Offender Needs Assessment Rating (SONAR; Hanson & Harris, 2000), and its successor the STABLE-2007 (Hanson, Harris, Scott, & Helmus, 2007), includes three items related to sexual self-regulation deficits and three items related to general self-regulation deficits. Hanson and Harris (2000) and Hanson et al. (2007) found that men who scored higher on these items were more likely to violently and sexually reoffend.

13.3.2.9 Risk Assessment

Four commonly used actuarial instruments that significantly predict violent and sexual offending among adult male sexual offenders have been identified by

Hanson and Morton-Bourgon's (2004) meta-analysis of sex offender recidivism studies: the Sex Offender Risk Appraisal Guide (SORAG; Quinsey et al., 2006), the Rapid Risk Assessment of Sexual Offense Recidivism (RRASOR; Hanson, 1997), the STATIC-99 (Hanson & Thornton, 1999), and the Minnesota Sex Offender Screening Tool-Revised (MnSOST-R; Epperson et al., 1998).

The SORAG is a 14-item instrument used to assess the risk of violent and sexual recidivism of previously convicted sex offenders within a specific time period of release. It is a modification of the Violence Risk Assessment Guide (VRAG; Quinsey et al., 2006), a 12-item actuarial scale that predicts risk of violence within a specified time frame following release in violent, mentally disturbed offenders. The SORAG uses the clinical record as the basis for scoring and incorporates the PCL-R scores for the calculations of risk.

The RRASOR is a 4-item screening instrument for risk of sexual reoffenses among males who have been convicted of at least one sexual offense. It relies on information obtained from files and consists of the following items: having prior sex offenses, having a male victim, having an unrelated victim, and being between the ages of 18 and 25 years. These four items are present in the STATIC-99, a 10-item clinician-rated instrument created for use with males who have committed at least one sexual offense. Three basic divisions of the STATIC-99 exist: demographic questions, criminal history questions, and victim questions. Scores range from 0 to 12 (although there is no significant difference in recidivism rates for scores between 6 and 12), and offenders are assigned to 1 of 4 risk categories based on their score (i.e., low, moderate–low, moderate–high, high). Scores have been shown to consistently produce accurate predictions regarding sexual reoffending (e.g., Barbaree, Seto, Langton, & Peacock, 2001).

The MnSOST-R is a 16-item instrument that relies on information available from files. It consists of four sets of factors to be rated: dynamic variables (e.g., discipline history while incarcerated), criminality/chronicity variables (e.g., number of sex offense convictions), offense-related variables (e.g., a victim who is a stranger to the offender), and unstable life variables (e.g., substance abuse).

13.4 Standardized Interview Formats

13.4.1 Sexual Dysfunctions and Paraphilias

As mentioned above, there are no widely used, standardized interviews for sexual dysfunctions or paraphilias. Some sexuality researchers have developed their own structured interviews for the diagnosis of sexual dysfunctions and paraphilias; however, the psychometric properties of these interviews have not been established. For example, one set of researchers created a semistructured interview to evaluate the presence or absence of the sexual disorders and paraphilias listed in the DSM-IV in pedophilic sex offenders (Raymond, Coleman, Ohlerking, Christenson, & Miner, 1999). It followed the structure of the Structured Clinical Interview for DSM-IV

Axis I Disorders-Patient Edition (SCID-P; First, Spitzer, Gibbon, & Williams, 1995). They found that approximately 16% of their sample met criteria for any current sexual dysfunction (24% lifetime) and one-third met criteria for any current additional paraphilia (53.3% lifetime).

In addition, Figueira, Possidente, Marques, and Hayes (2001) employed the DSM-IV criteria to diagnose sexual dysfunctions in patients diagnosed with panic disorder and social phobia using the SCID-P (First et al., 1995). However, the authors eliminated the criterion that the sexual dysfunction cannot be related to other Axis I disorders. They found that patients with panic disorder reported more sexual dysfunctions than those with social phobia (75% vs. 33.3%, respectively). The most common sexual dysfunction in male and female patients with panic disorder was SAD.

Corretti, Pierucci, de Scisciolo, and Nisita (2006) also used a modified SCID based on the DSM-IV-TR to assess for comorbidity between psychiatric and sexual disorders, premature ejaculation in particular. As with Figueira et al. (2001), Corretti et al. (2006) eliminated the criterion related to other Axis I disorders. They reported that mood and anxiety disorders were common in men with PE, and they suggest that social phobia may represent a related dimension of PE.

van Lankveld and Grotjohann (2000) employed the Composite International Diagnostic Interview, version 1.1 (CIDI; World Health Organization, 1992) to investigate psychiatric comorbidity in patients (diagnosed using DSM-III-R criteria; APA, 1987) with sexual dysfunctions (diagnosed with a structured interview they developed based on the DSM-IV criteria; APA, 1994). van Lankveld and Grotjohann used the GRISS (Rust & Golombok, 1986) to corroborate their diagnoses of sexual dysfunctions. They found a higher rate of lifetime affective and anxiety disorders in men with sexual dysfunctions, whereas women with sexual dysfunctions reported a higher prevalence of current anxiety disorders.

13.5 Case Illustrations

13.5.1 Case 1

13.5.1.1 Background Information

A young woman in her early 20s, Kelly was referred for sex therapy by her general practitioner to whom she had reported low to non-existent sexual desire. She had been married for 3 years to David (also in his 20s), whom she mentioned had accompanied her to the appointment and was in the waiting room. Before proceeding with the assessment, David was asked to join her, as the assessment and treatment of sexual problems is optimal when conducted with the couple.

The formal intake assessment was conducted over three 1-h sessions over a period of 3 weeks and included a clinical interview, psychometric testing, and referrals for Kelly to a gynecologist and a physical therapist.

Kelly and David had abstained from sexual intercourse until their wedding night in keeping with their religious convictions. In David's words, "the wedding night was a disaster." Kelly appeared very nervous and when they tried to have intercourse, she winced and complained of pain when he tried to penetrate. She finally broke down crying. Over the next few attempts in the ensuing months, penetration had indeed become possible but Kelly reported that it remained painful. She also reported discomfort with tampon insertion and pelvic examinations, although not of equivalent intensity. They had settled into a pattern of sexual interacting characterized by David's entreaties to have sex, Kelly's increasingly anxious attempts to avoid it, and the occasional sexual interaction (an average frequency of once per month) that was painful to Kelly and unsatisfying to both. They rarely talked about the problem.

Both David and Kelly were school teachers, although they worked at different institutions. They grew up in a rural part of Utah wherein small-town life was largely organized around faith-based activities. Both reported supportive families and a generally happy childhood. There was no history of physical or sexual abuse. Sex, however, was a relatively taboo topic in their religious culture and Kelly reported always feeling uneasy if it came up in conversation or on television. They had met in high school and neither had seriously dated anyone else. They reported being happy in all aspects of their relationship other than the sexual one. David appeared to have a calm temperament and Kelly also described him as easy-going, although sometimes a little too passive. She, on the other hand, came across as anxious and described herself as "a worrier" and "a little obsessive." She was wracked with guilt about her inability to fulfill what she described as her "wifely obligations," but having sex also made her feel guilty and "dirty." She worried that they would never have a family if this sexual issue did not get resolved. Despite the occurrence of pain during intercourse, both Kelly and David thought the central problem was Kelly's lack of interest and distaste for sexual activity. When reporting her sexual problem to her general practitioner, she had not even mentioned that intercourse was very painful. She was convinced it was a consequence of her lack of desire.

13.5.1.2 Psychometric Testing

The testing was biopsychosocial, in line with the recommended multidisciplinary approach for the treatment of sexual dysfunction. Areas targeted with psychometric measures were sexual dysfunction, relationship adjustment, anxiety, and pain-related experiences. The FSFI also supported the clinical-interview-derived diagnoses of Hypoactive Sexual Desire Disorder (HSDD) and Dyspareunia for Kelly. Because of the aversive nature of her attitudes about sex, the SAD was also administered and she endorsed a moderate degree of sexual aversion. The IIEF did not reveal evidence of sexual dysfunction in David. The DAS confirmed their report of having a satisfying relationship with the exception of sex. A scale to measure generalized anxiety (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006) was also administered to Kelly in light of her self-report of anxious thoughts and feelings. She scored in the high end of the mild range. The MPQ revealed high scores in the sensory and evaluative dimensions of the pain as well as in its intensity. Kelly's scores on the PCS were also very high and indicated a substantial degree of pain catastrophizing and anxiety about the experience.

The results of the pelvic examination and cotton-swab test performed by the gynecologist with an expertise in vulvar pain to whom Kelly was immediately referred yielded findings consistent with a diagnosis of provoked vestibulodynia (PVD). PVD is a common cause of dyspareunia in women of child-bearing age. The musculoskeletal examination performed by a physical therapist specializing in the pelvic floor demonstrated that Kelly suffered from considerable hypertonicity in the pelvic floor musculature.

13.5.1.3 Treatment Plan

The findings from this comprehensive assessment were used to design a treatment plan that would simultaneously target all problem areas: low desire, feelings of guilt about and aversion to sex, communication about sex, vulvar pain, hypertonicity, pain catastrophization, and anxiety. The treatment plan would require coordination between the sex therapist, gynecologist (especially if medical interventions or surgical procedures were opted for), and physical therapist, each targeting their areas of expertise but communicating with each other about progress, roadblocks, and alternatives.

13.5.2 Case 2

13.5.2.1 Background Information

Mr. Smith is a 41-year-old Caucasian male sentenced to 2 years in prison for Sexual Interference and Invite to Sexual Touching. He was referred for an assessment of treatment needs and risk for reoffense. The victims were four young females (his niece and three of her friends) ranging in age from 8 to 12 years. The sexual assaults occurred during sleepover visits to Mr. Smith's house and included fondling of the victims' breast and genital areas, digital penetration and attempted vaginal and anal intercourse on two occasions. Mr. Smith told the victims not to disclose the sexual assaults and purchased them toys (dolls) in an effort to maintain their cooperation. He also provided the victims with alcohol during their visits and encouraged them to use sex toys (i.e., a vibrator) in his presence. The assessment included a 3-h interview, a file review, psychometric testing, and completion of an actuarial risk measure and a dynamic risk measure.

Mr. Smith grew up in a small town in northern Ontario with his parents and two siblings. His parents are both deceased and he is estranged from his siblings.

Mr. Smith stated he was greatly affected by the deaths of his parents in 2003 and 2004. He received an inheritance, which he has used to support himself since then.

Mr. Smith reported that he has diabetes. He also described a history of depression and noted he has been prescribed antidepressant medication by his family physician on several occasions. He is currently taking antidepressant medication and reports that he finds it helpful. Mr. Smith denied any current suicidal ideation, but did acknowledge one prior suicide attempt, following the disclosure of his recent sexual offending. Mr. Smith consumed over 100 pills (Percocets) and cut his wrists. This attempt was interrupted by police after they gained entry to his home with his brother's assistance. Mr. Smith was transported to hospital where he was admitted to the ICU and treated. He was released after 72 h of observation and referred to his family doctor for follow-up. During the interview Mr. Smith appeared future focused and verbalized an interest in completing sex offender treatment.

A review of Mr. Smith's criminal record revealed one prior conviction of Sexual Assault from 1994. The related police report is no longer available. Mr. Smith claimed that a peer-aged female accused him of unwanted sexual touching during a party. He did not believe that he underwent an assessment or any treatment related to this offense.

Mr. Smith reported that he was sexually abused when he was 8 years old by an older male cousin. He noted that his first consensual sexual experience occurred when he was 16 years old and involved a similar-aged female friend. Mr. Smith reported that his sexual history is limited to three different sexual partners, including this friend. The other two sexual partners included a one-night stand when he was in his early twenties and a short-term girlfriend, also while in his twenties. Mr. Smith denied any other casual sexual encounters, one-night stands, or use of prostitutes.

Mr. Smith reported minimal interest in erotic material or venues; however, upon further questioning, he acknowledged that he owned a few pornographic magazines and videos, and that he visited pornographic Internet sites once a week. Mr. Smith stated that the content of the videos, magazines, and Internet sites was mainstream adult consenting. He denied visiting any sites that contained images of coercive or non-consenting sexual images, or images of children or teens. Mr. Smith denied that he had any nude photos of the victims. He also denied that he showed erotic material to any of the victims or that he owned any erotic toys or paraphernalia.

Mr. Smith did not report any concerns with the frequency of his masturbation. He reported thinking about sex one to two times per week. Mr. Smith acknowledged that he thought about his victims in a sexual manner and that he masturbated to these thoughts. He stated that these thoughts were disturbing to him. Mr. Smith denied that he is still experiencing deviant sexual thoughts about the victims, claiming that when he thinks about the victims he is overwhelmed with feelings of guilt and self-loathing. During the interview Mr. Smith conceded that he found the sexual contact with the victims enjoyable and "must have" received some sexual satisfaction from the behavior. He also reported feeling extremely guilty and conflicted afterward.

Mr. Smith denied any interest in or history of engaging in unusual sexual activity such as sadomasochism, voyeurism, exhibitionism, frotteurism, or bestiality.

He reported one instance of engaging in a threesome with his girlfriend and one of her friends. Mr. Smith was adamant that no other victims will come forward.

13.5.2.2 Psychometric Testing

On the MSI-II, Mr. Smith's scores suggested that he experiences anxiety and apprehension in the presence of women and he fears embarrassment and being seen as inadequate. He scored as being self-critical of his looks and experiencing feelings of loneliness and a need for affection. On the Molester Comparison Scale (i.e., a subscale of the MSI-II), an empirically-derived scale that examines the level of commonality in thinking and behavior between the test-taker and a reference group of adult male child molesters, Mr. Smith scored as being having a moderate level of similarity to the molester comparison group. On the Denial scale, Mr. Smith's responses indicated that he feels his inappropriate sexual behavior happened because he was depressed and that he made a mistake. On the Justifications scale, Mr. Smith's responses indicate that he believes his offenses occurred because his life was stressful. Results suggest that Mr. Smith does not have a full understanding of the dynamics of his sexual offending.

Mr. Smith's scores on the Bumby RAPE and MOLEST scales were unremarkable.

13.5.2.3 Phallometric Testing

Mr. Smith was administered the Child Sexual Violence Profile (Quinsey & Chaplin, 1988). There was no clear evidence of faking or voluntary control. The results were considered too low for valid clinical interpretation. It is possible that Mr. Smith's diabetes may be affecting his erectile responding.

13.5.2.4 Risk Evaluation

Mr. Smith scored as a moderate–high risk on the STATIC-99, which is an instrument designed to assist in the prediction of sexual and violent recidivism for sexual offenders. On the STABLE-2007, an instrument developed to assess change in intermediate-term risk status, assessment needs, and help predict recidivism in sexual offenders, Mr. Smith scored as having a moderate level of treatment needs. The STATIC-99 and the STABLE-2007 are then combined into a composite score to produce estimates of sexual recidivism, violent recidivism, and any criminal (not including breaches) recidivism. His composite score places him in the moderate–high priority category in terms of his level of treatment needs, supervision needs, and risk for reoffense.

The following areas have been identified as requiring sex offender-specific intervention in efforts to manage Mr. Smith's future risk for sexual reoffending: significant social influences, capacity for relationship stability, emotional identification with children, general social rejection, poor problem solving, sex drive/preoccupation, and deviant sexuality.

Mr. Smith is currently being treated pharmacologically for depression. Psychological intervention as an adjunct to his medication regime is strongly suggested to assist him with further managing his mood disorder. Once released to the community, Mr. Smith should be referred for continued psychiatric and psychological support and treatment.

13.6 Impact of Race, Culture, Diversity, and Age

Although an extensive discussion of the impact of race, culture, diversity, and age for all of the sexual dysfunctions and deviations is beyond the scope of this chapter, it is essential to emphasize the important role of these factors if we are going to have ecologically sound and inclusive models of sexual function and dysfunction. In contrast to the segregated thinking promoted by Western culture (i.e., a rigid, "either-or" approach; Hardy & Laszloffy, 2002), an interconnectedness perspective may hold more explanatory and clinical potential. Among other recommendations, Hardy and Laszloffy (2002) encourage therapists to view all therapy as cross-cultural and to engage in a constant process of self-exploration. More practically, it is essential for therapists to work respectfully within clients' religious and other beliefs and to recognize diversity in experiences, orientations, genders, and sociocultural circumstances.

13.7 Information Critical to Making a Diagnosis

Critical information needed for diagnosis includes the following:

1. A detailed description of the presenting issue
2. Personal significance attached to the presenting issue
3. Level of distress and areas of life affected
4. Onset of the problem
5. Situations affected by the difficulty
6. Frequency of the difficulty
7. Patterns of the behavior
8. What is the reason for seeking treatment at this time?
9. If partnered, how is the issue affecting the partner?
10. Information related to current/past partners/relationships
11. Sexual history, including information related to negative experiences (e.g., abuse)
12. Medical and psychiatric history, including past and present medications and surgeries
13. Alcohol and drug use and abuse
14. Gender, orientation, and sexual identity

15. Content and frequency of fantasies
16. Family of origin issues
17. Client's causal attributions for their difficulty
18. Comorbid conditions
19. Past or current convictions of problematic sexual behaviors
20. Cultural and religious schemas

13.8 Dos and Don'ts

13.8.1 Dos

1. Ask about sexual problems in a direct manner no matter what the presenting complaint.
2. Be open and nonjudgmental.
3. Understand and respect the clients' religious and cultural beliefs.
4. Provide normalizing statements and gently correct misinformation.
5. Ask about solitary sexual activities in addition to partnered activities.
6. Gaining information into fantasies may provide additional insight into the presenting complaints.
7. Ask questions about activities (e.g., anal sex) that are important for sexual health.
8. Ask about partner communication.
9. If working with a sex offender, gain information from as many sources as possible in order to obtain as comprehensive a history as possible.
10. Refer to a medical doctor for physical tests and laboratory investigations.
11. If the individual is partnered, encourage the participation of both partners in assessment and treatment.

13.8.2 Don'ts

1. Don't assume that you know everything about the client and his/her fantasies, sexual orientation, relationship status, sexual experiences, gender identity, etc.
2. Don't let lack of experience or discomfort with sexual issues prevent you from at least asking some screening questions about sexual dysfunctions; open the door for the client to discuss this topic and see if a referral may be needed if you do not feel competent. Most people will not spontaneously bring up a sexual problem. Direct questions must be asked.
3. Don't assume that older people, single people, disabled persons, people with intellectual issues, etc., are not sexual or sexually active.
4. In the case of sex offenders or individuals convicted of sexual crimes, don't believe everything they tell you as they may want to mislead the clinician into thinking that they are functioning at higher or lower levels depending on the situation.

13.9 Summary

There are a number of disorders related to sexuality, and each must be carefully assessed and characterized. At a minimum, a single question about any sexual problems is necessary to potentially raise an issue that the patient may want to address but feels too embarrassed to spontaneously report. Although no formal structured interviews exist to diagnose any sexual dysfunction or deviation, several interviews and assessment methods are available and can aid in the process of diagnosis. It is our hope that formal instruments for diagnosis become available in the future.

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Chapter 14
Eating Disorders

Risa J. Stein, Ryan D. Field, and John P. Foreyt

14.1 Description of the Disorders

Anorexia nervosa, bulimia nervosa, and binge eating disorder (BED) all involve observable eating, and often purging, behaviors. However, to develop a complete conceptual picture of each disorder, additional sociocultural, behavioral, cognitive, and emotional processes must be considered. To complicate matters, altered physiological functioning may result from as well as cause emotional and cognitive dysfunction. Thus, whereas interviewers will want to uncover diagnostic criteria, they should keep in mind the dynamics of the disorder so that the behavioral, cognitive, affective, and social manifestations of the disorder can be put into a conceptual whole.

Prevalence of anorexia nervosa among adolescent females is estimated to be 0.3% to 1.62% (Hoek & van Hoeken, 2003; Kaye, Klump, Frank, & Strober, 2000) with the restricting type being the least common (Fichter & Quadflieg, 2007). Bulimia, which according to research is a more common eating disorder when compared with anorexia nervosa, is estimated to occur in 1–5% of college age women, 1–3% of adolescent girls and women (Harris & Kuba, 1997), and 0.2% among young men (Warheit, Langer, Zimmerman, & Biafora, 1993). Approximately 15–50% of clients in weight-control programs experience BED while estimates for community samples reportedly range from 1 to 4% (Goldfein, Devlin, & Spitzer, 2000). Among children and adolescents, binge eating and subthreshold binge eating rates range from 2 to 40% (Glasofer et al., 2007; Lamerz et al., 2005; Tanofsky-Kraff et al., 2004). Prevalence rates, however, should be considered carefully and possibly tenuously as reports of the prevalence for bulimia, at least, have decreased over time leading some to suggest that significant cohort effects may exist among eating disordered clients (Vaught et al., 2008).

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14.1.1 Anorexia Nervosa

Of the three disorders described in this chapter, anorexia nervosa is the one most noted for its severe course and consequences. It is the eating disorder most likely to result in death, typically from complications arising from the state of starvation. Anorexia nervosa is a perplexing condition, for its most notable characteristic is self-imposed starvation in a country and culture blessed with an abundance of food. However, for anorectics, the apparent illogic of their actions is overridden by a psychological framework ruled by two powerful contingencies: The reward of weight loss and a morbid fear of fatness (Garner, Garfinkel, & Bemis, 1982).

The diagnostic features for anorexia nervosa are presented in Table 14.1. Those with the *restricting type* do not regularly engage in binge eating or purging behavior, whereas those with the *binge eating/purging type* do have binges or purges. Anorectics of the binge eating/purging type tend to be heavier, with more lability of mood, impulsivity, and drug abuse. It is notable that over 90% of anorectics are female (American Psychiatric Association, 2000). Such disproportionate representation of females may indicate a strong cultural influence in etiology (Brownell, 1991) or perhaps some undefined biological linkage. The heritability estimates of anorexia are as high as 76% (Corwood, Bouvard, Mouren-Simeoni, Kipman, & Ades, 1998) with concordance rates between MZ twins (55%) significantly higher than DZ twins (5%; Treasure & Holland, 1989).

The physical symptomatology of anorexia includes low metabolic rate, low blood pressure, cold intolerance, insomnia, bradycardia, pathological EEG patterns, alopecia, and dry skin (Williamson, 1990). The experience of an eating disorder during adolescence, specifically one characterized by extreme weight loss and/or repeated vomiting, often also results in the increased risk of a host of physical symptoms during early adulthood. These symptoms include fatigue and insomnia, pain, neurological symptoms, and poor cardiovascular health (Johnson, Cohen, Kasen, & Brook, 2002).

A number of psychological traits characterize the anorectic and tend to increase in severity with weight loss and remit with weight gain (Fairburn & Harrison 2003). Such features include dysphoric mood, shyness, anxiety, obsessive-compulsive behaviors, irritability, impaired concentration, and loss of sexual appetite (Fairburn & Harrison, 2003; Johnson, Cohen, Brook, Kotler, & Kasen, 2002). These characteristics, although the source of much inner turmoil, are frequently manifested in outward

Table 14.1 Diagnostic features for Anorexia Nervosa[a]

- They refuse to maintain body weight at or above a minimally normal weight for their age and height leading to a body weight less than 85% of that which is expected
- They have an intense fear of gaining weight or becoming fat, despite being underweight
- They experience a disturbed perception of their body weight, and/or their self-evaluation is unduly influenced by body weight or shape, and/or they deny the seriousness of their deficient weight

[a] Adapted from the American Psychiatric Association (2000)

behaviors viewed positively by family and friends. In many families, the presymptomatic anorexic child is frequently perceived as the pride and joy of the brood, often characterized by parents as being well-behaved, high-achieving, and perfectionistic (Halmi et al., 1977). However, emerging evidence suggests that conformity to high social standards may be employed by preanorectic girls in an effort to overcome difficulties in social interactions best characterized along autism spectrum dimensions and that anxiety-related symptoms often associated with anorexia may actually predate the onset of eating disordered behavior and contribute to their development and maintenance (Zucker et al., 2007).

In addition to mood disorders contributing to the risk of suicide, the presence of substance abuse, specifically alcohol abuse, significantly increases the risk of mortality among anorectics (Keel et al., 2003). Adolescents who experience eating disorders and survive to early adulthood remain at increased risk for suicide, anxiety, and depression (Johnson, Cohen, Kasen, & Brook, 2002).

14.1.2 Bulimia Nervosa

In recent years, bulimia nervosa has gained increasing attention as the extent of its occurrence and the severity of its symptomatology have become known. Although bulimia is literally translated to mean "ox hunger," for most with this condition, eating has little association with the fulfillment of normal biological hunger. Binge eating may be more a result of voluntary dietary restriction, distorted perceptions of body size, and the need to achieve an ideal body. The purging behavior is learned as a way to rid the body of excess calories from a binge. However, purging and subsequent dietary restriction lead to the next binge, thus continuing the cycle.

The diagnostic features for bulimia nervosa are described in Table 14.2. Those with the *purging type* try to rid their bodies of what they have just eaten, through self-induced vomiting, taking enemas, or using laxatives or diuretics, whereas those with the *nonpurging type* try to compensate for what they eat by fasting or excessive exercise.

Data from the available literature and a survey of professionals concerned with eating disorders failed to show a requirement that the binge consist of a large

Table 14.2 Diagnostic features for bulimia nervosa[a]

- They engage in recurrent episodes of binge eating characterized by (1) eating substantially larger amounts of food in a given time frame than most people would eat and (2) experiencing a lack of control over eating during these episodes
- They engage in recurrent inappropriate compensatory behavior aimed at preventing weight gain (e.g., self-induced vomiting; fasting; excessive exercise; or use of laxatives, diuretics, or enemas)
- The binge eating and compensatory behaviors both occur on average at least twice a week for 3 months

[a]Adapted from the American Psychiatric Association (2000)

amount of food, or that a minimal binge frequency (Table 14.2) be met before a diagnosis of bulimia nervosa is made (Wilson, 1992). Thus, bulimics may binge slowly; a binge may consist of a relatively small amount of food; and binging may occur as infrequently as once per week. The important psychological factors of feeling that the eating was out of control and that the food was "forbidden" and the resulting purging response seem to be the critical features for the diagnosis. Although there are no set criteria to establish the minimal intake during a binge episode, typically the bulimic ingests between 1,000 and 2,000 calories per binge (Fairburn & Harrison, 2003).

There is controversy as to whether the modality of purging is more important diagnostically than the psychological motivation to rid one's body of calories. For example, a client of ours habitually "corrected" her binge episodes with 20-mile bike rides. The excursions were marked by their compulsive and urgent quality. They sometimes occurred at odd hours in the morning, during inclement weather, or even during the course of a social gathering. This person was repulsed by the idea of vomiting, but she nevertheless had an extreme purgative reaction to binging. Regardless of modality, bulimia clients demonstrate a higher frequency of binging and purging as well as preoccupation with food than do clients classified as having eating disorders not otherwise specified (Schmidt et al., 2008).

The physical toll taken by the practice of bulimia may not be as great as the one experienced by the anorectic; however, it can be severe. Among the physical sequelae are esophageal rupture and hiatal hernias from frequent vomiting, urinary infections, impaired kidney function, irregular menstrual cycles, dental problems, electrolyte disturbances, and metabolic and endocrine changes (Mitchell, Specker, & de Zwann, 1991). Because many bulimics maintain a normal weight and appear healthy, the damage exacted by their compulsion often goes unrecognized, even by the closest of contacts, until medical intervention is required.

For most bulimics, there is a psychological cost of their practice that parallels the physical ones. Our culture promotes standards of acceptable behavior concerning ingestion and elimination (including vomiting). Bulimic behavior, with its sometimes prodigious consumption and forced elimination, crosses the boundaries of acceptability. Most who engage in this practice are exceedingly aware of its unacceptability; many are ashamed of it. Such awareness is associated with the low self-esteem, feelings of inadequacy, and self-derogation observed among many bulimics. The shame that accompanies this practice is probably the primary reason this problem remained in the closet for so long and continues to remain there for many sufferers.

Although the feelings of shame and embarrassment experienced by many bulimics may cause a delay in their seeking treatment, these same features often facilitate engaging them in treatment. However, of those presenting for counseling, there may be an overrepresentation of individuals with complications from concomitant substance abuse and self-injury (Fairburn & Harrison, 2003). Stice, Burton, and Shaw (2004) suggest that risk factors for bulimia, substance abuse, and depression are to some extent interwoven and dependent upon one another. The rates of major depression and alcohol dependence among bulimics are approximately 20% and

4% (Garfinkel et al., 1995). Thus, the clinician conducting an eating disorder interview should assess for possible comorbidity.

Keel and Klump (2003) present compelling evidence for the contribution of cultural factors in the development of bulimia. For instance, bulimia is noted rarely in populations devoid of Western influence. Other factors that may increase the risk of bulimia include childhood and parental obesity, parental alcoholism, and early menarche (Fairburn & Harrison, 2003). Moreover, the genetic contribution to bulimia seems limited, particularly in comparison to rates for anorexia. Concordance rates for MZ and DZ twins are 35% and 30%, respectively (Fairburn & Harrison, 2003).

14.1.3 Binge Eating Disorder

Some individuals have problems with recurrent binge eating, but do not engage in compensatory vomiting or use of laxatives. In recognition of this disorder, the DSM-IV-TR (APA, 2000) includes BED as an eating disorder deserving of further study (see Table 14.3). BED, as proposed, includes the following criteria: Recurrent episodes of binge eating in the absence of the inappropriate compensatory behaviors characteristic of bulimia nervosa, lack of a feeling of control over eating, and distress over binge eating. Perhaps as a result of its inclusion in the DSM and the continued increasing rate of obesity in our society, in recent years, a large share of the eating disorders literature has focused on BED.

Prevalence rates for BED vary greatly. Estimates suggest that about 2–5% of the general nonobese population (Spitzer et al., 1993), 30–90% of obese individuals (Devlin, Walsh, Spitzer, & Hasin, 1992; Hsu et al., 2002; Kral, 2001), and 5–33% of the clinical population (Fairburn & Harrison, 2003; Stunkard et al., 1996) may meet criteria for BED. Moreover, estimates of subthreshold BED among overweight and obese children and adolescents seeking treatment range from 20 to 30% (Decaluwe, Braet, & Fairburn, 2003; Isnard et al., 2003). Unlike anorexia and bulimia, BED is not at all uncommon among men and persons of color (Grilo, 2002) and while adolescence often marks the onset of binge eating, clients seeking treatment are typically older than most anorectics or bulimics (Grilo & Masheb, 2000).

Table 14.3 Diagnostic features for binge-eating disorder[a]

- Recurrent episodes of binge eating characterized by at least three of the following: Eating more rapidly than normal; Eating until feeling uncomfortably full; Eating large amounts of food when not feeling physically hungry; Eating alone because of feeling embarrassed about one's eating; Feeling disgusted, depressed, or guilty after episodes of overeating
- They experience significant distress over their binge eating
- The binge eating occurs on average at least 2 days a week for 6 months

[a] Adapted from the American Psychiatric Association (2000)

The diagnostic criteria indicate that this disorder shares the same dynamics found in bulimia nervosa including binge eating and increased rates of psychopathology. Among adolescents, Glasofer et al. (2007) note that number of binge episodes and psychopathology are positively related. Similar findings have been noted among adults. The assessment of binge eating should address the role of stress in the binge eater's life. Research suggests that binge eating intensifies as a result of perceived daily hassles (Crowther, Sanftner, Bonifazi, & Shepherd, 2001). As stress increases the likelihood of a binge episode increases as do the total number of calories consumed during the binge. Similarly, stress may also negatively impact treatment outcome. For example, Pendleton et al. (2001) found that the mean binge days/week was 3.3 times greater among BED clients experiencing high levels of negative stress at the commencement of treatment than among those reporting low levels at the 16-month follow-up.

The impact of stress on the BED client may depend upon whether or not they present with affective disturbances. Grilo, Masheb, and Wilson (2001) identified a subgroup of BED clients characterized by the same moderate rates of restrained eating as evidenced by the larger BED group, but who also present with increased rates of affective disturbances. The latter group may prove more resistant to treatment. Grilo, Masheb, and Wilson (2005) reported that in their sample of BED clients, 46% had experienced major depression, 32% had suffered from anxiety, and 24% had a positive history of alcohol abuse. Therefore, as is the case with bulimia, the clinician should assess for the presence of comorbidity and the role any additional psychopathology may play in binge-type eating.

Affective disturbance as evidenced by eating disorder psychopathology, depression, and lower levels of self-esteem are also positively related to higher shape/weight overvaluation (Hrabosky, Masheb, White, & Grilo, 2007). As is often the case with anorexia, shape and weight overvaluation is not related to body mass index in BED clients (Hrabosky et al., 2007). Moreover, overweight individuals with BED demonstrate higher rates of overvaluation than their overweight counterparts without BED (Allison, Grilo, Masheb, & Stunkard, 2005; Hrabosky et al., 2007).

14.1.4 Overview of Conditions

The diagnostic interview process will want to touch on the specific criteria set forth in DSM-IV-TR to achieve an official diagnosis. While probing for specifics, the interviewer should keep in mind psychological themes often occurring with eating disorders. These themes may involve:

1. The extreme fear of being fat or the disgust at being fat.
2. Low self-esteem exacerbated by a hypercritical body image and failure to control eating habits and weight.
3. The belief that self-worth hinges on bodily appearance.

4. The perceived blocks to developing interpersonal relationships due to negative self-image and the feeling of isolation associated with eating disorders.
5. The intrapunitive nature of exercise and other abusive purging techniques as well as the feeling that self-punishment is deserved for failure to control eating or weight.

14.2 Procedures for Gathering Information

Our procedure for gathering information is generally to incorporate this process into treatment as naturally and comfortably as possible. The initial meeting has more of the elements of an interview than subsequent ones. Issues suspected to have relevance to the client's eating problem are explored and investigated. Their validity is determined by the manner in which the client is affected (i.e., "treatment validity"); if they bring insight or change or both, then relevance is verified.

The multifactorial etiology of eating disorders often requires a multidisciplinary approach to treatment. In such cases, it is important for the therapist to be aware of the diagnoses of the other providers involved in the treatment, as they may have relevance. For example, in anorexia nervosa, weight must be returned to a medically determined minimum before effective work can begin on the psychological issues (Goldner & Birmingham, 1994). In cases of bulimia, the client may seek psychotherapeutic help without prior consultation with a physician. It is incumbent on the therapist to insist on medical examination early in treatment as well as during its course if any form of purging is involved. As indicated previously, the continual practice of vomiting and abuse of diuretics or laxatives can lead to serious physical consequences. Our experience has been that the participation of a physician and registered dietitian is essential in the treatment of an eating disorder. An exercise physiologist is also needed to prescribe sensible exercise.

It is not our expectation that the initial diagnostic meeting (usually the first treatment session) will reveal much of the client's difficulties. Eating disorders and the associated practices (e.g., vomiting) are considered aberrant in our society, and most clients are acutely aware of this proscription. Thus, it is common for information to be purposely withheld, "forgotten," or distorted in the early interviews. This pattern is especially typical of anorectics, who frequently deny the existence of a problem and do not see the necessity for their presence in treatment. Obtaining accurate information is a *process* based on many of the factors that make for effective treatment: A good therapeutic relationship, trust, and the client's sense that the therapist is working with and for his or her benefit. We find that as our relationship with the client solidifies, the diagnostic picture becomes concurrently richer.

Considering the shame involved in these disorders, it may be helpful with a female client if the interviewer is a female who has had personal experience with eating disorders and can self-disclose that fact. At least the interviewer can reveal that she has at times overeaten after being on a diet and has on occasion felt somewhat out of control with regard to her eating. She might also discuss how vomiting brings a feeling of relief in the case of stomach flu and how she can understand how this can become a habit.

Sensitivity is another important aspect of the process of diagnosis. The therapist needs to be aware of the client's sensitive areas in probing for information and, at times, be willing to delay seeking the information until readiness on the client's part is apparent. A good example of this necessity occurs with the use of food records. Although we find records to be invaluable tools for diagnosis and treatment, some react to our use of them with considerable resistance. Food records require individuals to document patterns that they have frequently denied or suppressed. Their accurate utilization would be tantamount to a personal confrontation with the problem. The therapist should be sensitive to the client's readiness for such confrontation in suggesting the use of food records.

A particularly sensitive area for many clients is that of the effect their disturbed eating patterns and real or imagined body image has on their sexual relations. A client of ours, Beth, had lost a substantial amount of weight in treatment and found that one of its concomitants was a deteriorating relationship with her husband. Symptomatic of this deterioration was his growing sexual impotence. This problem, needless to say, created stress in both parties. With regard to Beth and her treatment, these occurrences were viewed in terms of their possible utilization as a rationale for returning to the prior state (i.e., overweight and disordered eating). From the standpoint of diagnosis, Beth revealed these problems and saw their possible pertinence to treatment.

14.3 Case Illustrations

14.3.1 Case 1

Linda is an attractive, normal-weight 32-year-old female employed at a temporary services agency. She lives with her husband Bill, an accountant who has little understanding of or tolerance for the psychology of eating disorders. He apparently has no ability to express warmth or sympathy for her problem. When Linda came to her first session, she was binging and purging about five times per week. Binges were quite variable in amount and purging consisted of vomiting, taking ten or more laxative and stool softener pills each day, and engaging in at least 2 h a day of intense aerobic exercise and swimming.

Linda's father was an alcoholic who verbally abused her. She had very traumatic dating experiences in high school and had dabbled in drugs and alcohol after graduating. Her self-esteem was near zero. She had two small children and felt very guilty about being an inadequate mother.

The following are excerpts from her initial interviews:

T: What is the main reason you have come to this clinic?
P: Well, I guess it's because I'm too fat.
T: What parts of your body are too fat?
P: My legs are really too thick. I am wearing loose pants. If you could see my legs, you would see the legs of an elephant. [Her legs appear normal.]
T: How did your legs get thick? Have they always been thick? [Therapist leads the client to elaborate on body image distortion.]
P: Ever since I was a teenager. They got thick because I eat too much. I can't stop eating.
T: What do you mean, you can't stop eating? [Explore sense of lack of control.]
P: Well, when I am home by myself I get to eating whatever I can find. Like a bag of potato chips or any leftover food in the fridge. Once I get going, I really look for all the food I can find that can be eaten.
T: Don't you stop eating when you are full?
P: I really don't realize I am full, my eating just keeps going until I just can't eat any more. I worry about choking to death.
T: What do you do after you eat all you can?
P: For a few minutes, I just seem to blank out mentally. Then I go to the bathroom.
T: What do you do in the bathroom?
P: You know, I get rid of it.
T: Get rid of the food? [Not probing for intimate details of method at this early stage.]
P: Yes.
T: How do you feel then?
P: I feel weak, but I'm glad the food didn't stay in my body.
T: So without getting rid of the food you would be fat, given the amount of food you eat?
P: I can't imagine how fat I would be like the fat lady of the circus.
T: But you feel your legs are too fat? [Probe for body image.]
P: Yes. I wish I could just take a knife and carve them down to decent size. They have fat surgery now for that, don't they?

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T: Tell me about your last problem with food.
P: I was at a restaurant. I was having a salad with nonfat dressing since I really can't eat any fat in my food. [dietary rigidity] My neighbor was with me and she told me to try a bite of her apple turnover because she said it was so good. So I did.
T: What happened then?
P: I started to feel nauseous right away. I could feel the fat from that turnover inside my throat and I could see in my mind's eye the fatty food in my stomach. It was like I swallowed a spider, something I wanted to get rid of right away, so I went to the restroom and did it.
T: Did you feel O.K. after getting rid of it?

P: No, of course not. I knew I was getting out of control in my eating since I had eaten the turnover. So I went home and jogged slowly in the park for about 1 h. I think the calories from 1 h of jogging would burn up the turnover. I need to jog to get back into control.

T: You must be in really good shape to be able to jog for an hour.

P: I guess so. But I plan to increase my jogs to 2 h on weekends because I think that will help burn up the fat on my legs. I see marathon runners and they have nice legs, I mean the women who run all the time.

14.3.2 Case 2

Karen is a 24-year-old female who came into treatment for bulimia. She has been married for 2 years to Dennis, a 27-year-old attorney. Her bulimia had become increasingly worse during the past year, and she had become frightened. Her husband called to make the appointment and accompanied her to the first session. Karen was later seen individually in therapy, and a pattern became increasingly clear. After graduating from college, Karen took a job as a filing clerk at a large oil company at her father's insistence. She was still in the same job when we began meeting. She was clearly overqualified, hated it, but she had not attempted to leave. Second, Karen had been a skilled organist at her local church, where she was respected and in great demand on Sundays and for special occasions. She also had many close friends there. When she married, her husband insisted she join his church, one of Houston's largest, where he was deacon and active on many church committees. Because the church had many talented organists, she played only once there in almost 2 years. Third, Dennis's mother, who lived close by, called or visited daily. Her calls were frequently like, "Put Channel 13 on right now. There's a program I want you to see," or, "Look at the advertisement on page 6 of today's paper. There is a dress there you should buy."

T: These examples we have been discussing over the past few sessions seem to be related.

P: I have not seen the connection previously, but it is as if I do not have any control over my life any more.

T: Tell me more about that.

P: Well, my father got me my job, which I cannot stand, but I seem to be afraid to leave. I attend my husband's church and no longer play the organ, which I love to do. My husband's mother tells me what I should watch, read, and wear. Who is running my life? About the only part of my life I control is my weight, by binging and purging.

Through problem solving and some assertiveness training, Karen decided to change jobs, attend her husband's church once a month with him and play the organ at her church the rest of the time, and take a more direct stance with her mother-in-law. With the control shifted to Karen, her bulimia decreased dramatically.

14.4 Standardized Interview Formats

Structured interview formats ensure that all diagnostic criteria are covered in an orderly fashion during the interview process. This structure is important for research projects and may be necessary in clinics with a large volume of clients and limited resources. For example, measures such as the Eating Attitudes Test (EAT) help to screen individuals for behaviors related to anorexia nervosa (Picard, 1999) whereas other assessment devices are of a more general nature. The EAT is also available in a 26-item format (EAT-26; Garner et al., 1982). A score above 20 is considered high with regard to endorsement of items indicative of disordered eating including binging and purging.

The Eating Disorder Inventory (EDI) and the Eating Disorder Inventory-2 (EDI-2) are assessment devices created to measure psychological characteristics and maladaptive behaviors common to anorexia nervosa and bulimia nervosa (Williamson, Anderson, Jackman, & Jackson, 1995). The 64-item EDI has eight subscales. The subscales Drive for Thinness, Bulimia, and Body Dissatisfaction were created to assess an attitude towards one's body shape, weight, and eating habits (Picard, 1999). The other five subscales: Ineffectiveness, Perfection, Interpersonal Distrust, Interoceptive Awareness, and Maturity Fears examine psychological characteristics similar to those endorsed by individuals with an eating disorder (Picard, 1999). The EDI-2, a revised version of the EDI, has the same features and items as the EDI with the addition of 27 items forming the three subscales of Asceticism, Impulse Regulation, and Social Insecurity. Because the EDI and EDI-2 are so closely related, many of the psychometric properties that were established for the EDI are relevant for the EDI-2 as well (Picard, 1999).

Much of the normative data available for the EDI and the new subscales of the EDI-2 were based on both male and female clinical and nonclinical college samples (Williamson et al., 1995). Internal consistency is fairly high for the EDI and EDI-2. With the exception of the Maturity Fears subscale (0.65), the alpha coefficients for the EDI scale range from 0.69 to 0.93. However, these coefficients are a product of a sample of 11–18-year-olds (Williamson et al., 1995). In addition, the alpha coefficients for the EDI-2 range from 0.70 to 0.80, with the exception of the Asceticism subscale (0.40). These coefficients were produced with a group of nonclinical subjects (Williamson et al., 1995). The test–retest reliability was assessed at three different intervals: One-week test–retest reliability ranged from 0.67 to 0.95; three-week test–retest reliability ranged from 0.65 to 0.92; and one-year test–retest reliability ranged from 0.41 to 0.75.

Concurrent, predictive, and discriminant validity have each been established for the EDI and EDI-2. During a 1- and 2-year follow-up, the EDI accurately predicted the presence of binge eating using the Bulimia scale (Williamson et al., 1995). In addition, the EDI subscales, Drive for Thinness, Bulimia, and Body Dissatisfaction, demonstrated expected correlations with measures assessing eating and dieting behaviors and not with general psychopathology measures (Williamson et al., 1995). An inverse relationship was demonstrated for the remaining subscales

(Ineffectiveness, Perfection, Interpersonal Distrust, Maturity Fears, and Interoceptive Awareness). These subscales were highly correlated with general psychopathology measures rather than measures assessing eating and dieting behaviors. Finally, the EDI was able to accurately classify 85% of participants into subtypes of anorexia nervosa (Williamson et al., 1995).

Overall, the EDI and EDI-2 are useful measures for diagnosing eating disorders. Furthermore, the EDI and EDI-2 can be used as treatment outcome measures (Williamson et al., 1995). Both measures are simple to administer and require approximately 20 min. However, there are several concerns regarding the use of these measures. For example, because they are self-report inventories, there is the possibility that an individual can over- or underreport symptomatology. Furthermore, because the EDI and EDI-2 are general eating disorder assessment devices, it may be inappropriate to use them when working with particular special populations (i.e., female athletes and handicapped individuals).

The Eating Disorders Examination (EDE 12th edition; Fairburn & Cooper, 1993) consists of 62 items assessing symptoms of bulimia over the 4-week period preceding the interview. The instrument was designed more for assessing therapeutic progress than for detailed initial diagnosis. The EDE consists of four subscales (Shape Concern, Weight Concern, Dietary Restraint, and Eating Concern) and several individual items assessing frequency of binge eating in a semistructured interview format (Pike, Loeb, & Walsh, 1995). EDE questions are designed to differentiate between three types of overeating: Objective bulimic episodes, objective overeating, and subjective bulimic episodes. The EDE regards consumption of large amounts of food and loss of control as criteria for a binge episode. The presence or absence of these criteria distinguishes the previously mentioned categories of overeating. For instance, subjective bulimic episode is characterized by the absence of consuming large amounts of food and the presence of loss of control while objective overeating involves the inverse. Objective bulimic episode is characterized by the presence of both criteria (Pike et al., 1995). As part of the EDE's examination of the frequency of overeating and purging, the client is asked to keep a food diary for 4 weeks (Pike et al., 1995).

Beumont, Kopec-Schrader, Talbot, and Touyz (1993) found that each of the subscales in the EDE demonstrate significant internal consistency (alpha ranging from 0.68 to 0.90). Several studies have assessed the interrater reliability of the EDE. Cooper and Fairburn (1987) reported perfect correlations between raters on 27 out of 62 items on the EDE and Glasofer et al. (2007) reported a range from 0.87 to 0.98 for subscale and total scores. Test–retest reliability correlations for the EDE are reportedly above 0.70 for all subscales (Rizvi, Peterson, Crow, & Agras, 2000). Because the EDE is administered in an interview format by interviewers trained in the assessment of eating disorders, the measure is less vulnerable to false information than self-report measures. The EDE also has been found to discriminate between anorexia nervosa and bulimia nervosa as well as bulimia nervosa and restrained eaters (Pike et al., 1995). Wade, Byrne, and Bryant-Waugh (2008) report that the EDE is suited for diagnostic and predictive purposes.

The EDE-Q is a self-report questionnaire based upon the EDE (Fairburn & Beglin, 1994). The EDE-Q delivers data pertaining to the same four subscales as the EDE as well as frequency of overeating. In comparing bulimic clients using the EDE and EDE-Q, research suggests that the EDE-Q results in higher estimates of weight and shape concerns as well as objective bulimic episodes (Black & Wilson, 1996). However, there is some concern that the EDE and EDE-Q do not provide comparable assessments of frequency of binge eating in clients with diagnosed BED (Wlifley, Schwartz, Spurrell, & Fairburn, 1997). Moreover, while useful in assessing objective bulimic episodes, the EDE-Q does not evidence the same utility in assessing subjective bulimic episodes or objective overeating in BED clients (Grilo, Masheb, & Wilson, 2001).

The Eating Behaviors Interview (EBI), derived from the EDE, assesses binge eating, anorexia, and bulimia symptoms during the past 3 months (Field, Taylor, Celio, & Colditz, 2004). The EBI's reliability was assessed through the use of a stratified random sample at two different sites in the US. Kappas for the EBI items with the highest frequency of positive responses range from 0.56 to 1.0. Field and colleagues created a modified version of the original EBI developed by the McKnight Foundation's Multicenter Longitudinal Study on Risk Factors for Eating Disorders, which eliminated items not relevant to diagnosis and ensured wording appropriate for preadolescents and adolescents. The modified Field et al. version of the original face-to-face EBI useful for phone interviewing required approximately 15–20 min.

The Interview for Diagnosis of Eating Disorders (IDED; Williamson, 1990) was designed to evaluate the core psychopathology of bulimia nervosa, anorexia nervosa, and obesity. It also assesses diagnostic criteria proposed by Williamson (1990) for "compulsive overeating" which is similar to BED. This instrument covers historical, medical, and family information as well as current behavior and cognitions regarding eating and food. The IDED has rating scales for each disorder, which allow the evaluator to rate each DSM-IV-TR symptom on a 7-point scale.

14.5 Information Critical to Making the Diagnosis

Strong evidence suggests that the eating disorders are influenced by physiological factors, familial food habits, sociocultural influences, self-perception, familial interaction patterns, and emotional status. The following discussion highlights information that we, from our research and experience, consider important in the diagnosis of eating disorders. This information is applicable to all the eating disorders, though the extent of applicability may differ with the disorder and individual.

Prior to an elaboration of *what* is required for a diagnosis, a reiteration of *how* of this process is important. For some clients, there is considerable shame, guilt, and pain associated with their problem. In this regard, the revelation of the particulars of their difficulty is often an emotionally trying task. Hence, sensitivity and tentativeness are essential in obtaining information. No information is worth risking the impairment of the therapeutic relationship. Information is obtained most readily and comfortably when it is obtained in the context of therapy and not apart from it.

That is, inquiries regarding behavior, interpersonal relationships, and feelings are made as part of a treatment session when appropriateness is obvious and the client is judged ready.

14.5.1 Medical and Physical Status

For almost all the eating disorders, the point of departure for treatment is information concerning the state of the client's physical health. As noted earlier, the practices regularly engaged in by some clients can cause varying degrees of physical damage and even death. Therefore, medical assessment is a necessary first step to ensure the client's physical welfare. In cases in which the disorder has severe physical ramifications, it is highly recommended that periodic medical evaluation be incorporated into the treatment plan. It should be noted that the individual's physical appearance may belie the physiological imbalances that are not always obvious. Many bulimics maintain a normal weight while in the throes of extensive purging practices. The electrolyte imbalances that result from this behavior may not become observable until clients have fallen into a severe state of distress.

A Body Mass Index (BMI) of 17.5 or less is indicative of anorexia nervosa (LoBuono, 2001; Wilson, Grilo, Vitousek, 2007). The client's physical condition is sometimes intimately associated with readiness for therapy. If the disorder has progressed to its more advanced stages, the consequences of the starvation will make any attempts at therapy fruitless. Such clients must achieve a medically prescribed weight and strength before such efforts can begin (Goldner & Birmingham, 1994).

Because of the potentially severe consequences of anorexia, we suggest that treatment of a client begins even if all the diagnostic criteria have not been met. In particular, the criterion of 15% below expected weight (APA, 2000) must be viewed with flexibility. For some clients, original body weight represents a degree of overweight, whereas for others it is normal or even underweight. In the latter cases, 15–20% weight loss may yield severe emaciation.

14.5.2 Who Wants the Treatment?

This question is an important one in processes that require personal change. When treatment has been sought by the client, the motivation implied provides the basis for effective therapeutic work. On the other hand, when the impetus for treatment derives from another, greater difficulties can be expected. This difficulty is typified in anorexia, in which it is frequently the case that the client is brought to treatment by concerned parents. The client is generally unable to comprehend the existence of a problem and is therefore disinclined to enter treatment.

The matter of who wants the treatment is also problematic in cases of BED with obesity. We occasionally find that a client has come for treatment because of the insistence or at least strong encouragement of another. The source of this encouragement is often the family physician, spouse, or close relative. In such instances, the matter of client motivation is explored in detail at the beginning of treatment. If it is apparent that the client does not desire treatment, it is usually recommended that treatment be delayed until a more appropriate time.

14.5.3 Behavior

Behaviors are the external manifestation of the eating disorder; their nature and frequency largely define the severity of the problem. Examples of these behaviors include binge eating, vomiting, limited food intake, excessive exercise, and strange food-related rituals (e.g., order of food consumption, insistence on a specific place setting, lists of forbidden foods, and regular departures to the bathroom after meals). It is helpful for both diagnosis and treatment that such behaviors be quantified. By doing so, the client and therapist have a baseline with which to compare the later progress.

For the nonhospitalized client, self-report is the only practical way to obtain information on behavior. Self-reporting can be accomplished through use of either food records or short-term dietary and behavioral recall. It is our preference to use food records, though both techniques have value. Grilo et al. (2001) had bulimic clients self-monitor using the EDE and reported acceptable convergence with the EDE and the EDE-Q. However, because of the sensitive nature of these behaviors, we place no insistence on these records if the client shows resistance to their completion.

The client's behavioral patterns may assist in the development of a more specific definition of the disorder and enhance the possibility of using appropriate interventions. The usefulness of behavioral patterns is exemplified by the bulimic and nonbulimic variations of anorexia. Some investigators define a bulimic anorectic as an anorectic who purges. Strober (1981), however, studied the etiology of bulimia in anorexia nervosa and found significant differences. Primarily, his results indicated that the family life of the bulimic anorexic is more tumultuous, conflict-ridden, and negative in comparison with that of the nonbulimic. Bulimics also seem to have greater tendencies to engage in impulsive behaviors: Drug use, alcoholism, stealing, self-mutilation, and suicide (LoBuono, 2001). In contrast to the typical view of the anorectic as introverted, the bulimic variation is likely to be more socially and sexually active (Johnson, 1982). The symptom complexes that differentiate the bulimic and nonbulimic anorectic suggest disorders of substantially different etiological and psychological nature.

14.5.4 Cognitive and Emotional Factors

Examples of cognitive distortions have been reported for anorexia nervosa (Garner et al., 1982), bulimia (Wonderlich, Engel, Peterson, Robinson, Crosby, Mitchell et al., 2008), binge eating (Loro & Orleans, 1981), and obesity (Mahoney & Mahoney, 1976). We have found that certain of these distortions are present in all eating disorders (Fennig, Hadas, Itzhaky, Roe, Apter, & Shahar, 2008), indicating the possibility of a cultural pattern gone awry. In some, for example, staunch perfectionism is the cause of much distress and sometimes failure. These individuals proceed with substantial success on a diet until the first infraction occurs, no matter how minor. The inability to maintain a perfect record sends many into a binge that ends with self-recrimination and guilt. Emotional factors such as being teased about weight and shape and other factors such as body dissatisfaction, dietary restraint, weight cycling, and negative affect were found to be significant predictors for binge eating in obese women and men (Womble et al., 2001). A similar underlying psychiatric comorbidity between bulimia and BED may actually promote a shift from BED to bulimia over time (Fichter & Quadflieg, 2007; Fichter, Quadflieg, & Hedlund, 2008).

Psychological characteristics associated with anorexia included distorted thoughts and beliefs (Garner et al., 1982), distorted body image (Crisp & Kalucy, 1974), and fears about matters of self-control. Perfectionism in the anorectic takes on an extreme form. The anorectic perceives her body as too large regardless of how thin she becomes (Warah, 1989). Some carry this trait in all aspects of their life as well as in their anorexia.

As mentioned previously, there appears to be significant comorbidity between affective and anxiety disorders and anorexia nervosa (Halmi et al., 1991). Although personality disorders, especially borderline personality disorder, have been thought to be associated with bulimia nervosa, the relationship is not clear (Ames-Frankel et al., 1992). Overall, low frustration tolerance and low self-esteem are also frequently noted psychological correlates of eating disorders (Foreyt, Poston, Winebarger, & McGavin, 1998). It may be the case, however, as suggested by Marmorstein, von Ranson, Iacono, and Malone (2008) that young women unhappy with their weight may generalize their dissatisfaction, becoming unhappy with themselves overall, in turn resulting in depressive symptomatology. Eating pathology, predictive of subsequent demonstration of depressive symptoms, appears stable from preadolescence through late adolescence (Marmorstein et al., 2008).

Research to date provides inconclusive evidence of the effectiveness of cognitive behavioral therapy (CBT) for anorexics. While CBT may increase levels of engagement in anorectic clients, studies are lacking and well-controlled studies with strong comparison groups are even scarcer (Wilson et al., 2007). On the other hand, CBT has been demonstrated to eliminate binging and purging in approximately 30–50% of bulimic clients with many more showing marked improvement in symptoms (Wilson et al., 2007). CBT targets the core dysfunctional beliefs associated with bulimia thus reducing the overall level of general psychopathology and improving self-esteem and social functioning. Since cognitive and emotional presentation in BED clients in treatment is often very similar to that noted with bulimics, it is no surprise that CBT is also effective with binge eaters. Manual-based CBT treatment for BED typically evidences around 50% remission from binging and significant reduction in associated psychopathology with very low attrition in trials (Wilson et al., 2007).

14.5.5 Familial Factors

The eating disorders are the products of multiple influences. One of the most important influences is the family, for it has an impact on the individual's development of self-concept, values, food and eating patterns, and personal standards. Specific ways in which the family may impact eating disorders have been suggested by various clinicians and theorists (e.g., Pike & Rodin, 1991; White & Boskind-White, 1981).

The therapist should assess for familial patterns of interactions and behaviors related to the client's difficulties. However, while numerous studies have examined the functioning of families of anorexic patients, familial factors associated with bulimia have been sparse. In a clinical investigation, Strober (1981) reported a number of significant differences between families of bulimic and nonbulimic anorectics. Families of bulimics, in comparison with those of nonbulimics, were found to have less structure, less cohesion, and more conflict and negativity.

In cases in which the client remains in the care of the parents, diagnosis and treatment of the entire family is frequently necessary. In particular, young adolescents with anorexia nervosa or bulimia nervosa may be able to maintain their weight gain and improve their psychosocial adjustment when both parents and adolescent are involved in therapy within family-based treatment programs (Ghaderi, 2001; Mitchell & Carr, 2000). Overall, family therapy is typically viewed as an important therapeutic component (Goldner & Birmingham, 1994).

There have been mixed results regarding the association between sexual abuse and eating disorders. However, it is generally accepted that sexual abuse is a common theme among anorectics (Thompson, 1994; Wonderlich, Brewerton, Jocic, Dansky, & Abbott, 1997). Tripp and Petrie (2001) found that women who were sexually abused reported feelings of shame and guilt resulting in body disparagement they hypothesize may play a role in the subsequent development of eating disorders.

Family therapy for anorexia nervosa is the most frequently researched therapy modality. For younger clients with a recent onset of symptoms, conjoint family therapy has demonstrated recovery rates of around 90% at 5-year follow-up (Russell, Szmukler, Dare, & Eisler, 1987). However, for older clients and those with a longer duration of symptoms, family therapy did not produce beneficial results. In addition, despite the often cited history of dysfunction in families of bulimic clients, there is a severe paucity of research investigating the usefulness of family therapy for this population. The same can be said for clients with BED.

14.5.6 Social Factors

For many with eating disorders, social factors are pertinent to both the etiology and maintenance of their disorder. From a sociocultural perspective, eating disorders are likely to be a product of contemporary American society (i.e., a society that places inordinate value on slimness while simultaneously emphasizing the consumption of an abundant food supply). Becker, Burwell, Gilman, Herzog, and Hamburg (2002) demonstrated this influence by introducing Western media exposure via television to girls in Fiji. Within a month they noted a significant increase in binge eating and within 3 years there was an increase of purging from 0 to 11.3% among the Fijian girls. On the other hand, Keel and Klump's (2003) review of cultural factors across time reveals greater stability in the incidence of anorexia suggesting either limited social influence in the development of anorexia or at least cultural factors that have remained less fluid across time.

White and Boskind-White (1981) theorize that bulimia may occur because of the need that some women feel to fit into the role of "stereotyped femininity." In fulfilling this stereotype, these researchers suggest that the basis for bulimia is also developed and reinforced; this basis includes a need to please others, tendencies toward passivity, and an excessive concern for appearance and thinness.

In many cases of bulimia, for example, the notion of purging is obtained from an acquaintance or friend as an alternative to the consequences of excessive eating. For the suggestive, purging begins as a logical and apparently socially acceptable way to consume voraciously without substantial weight gain. Unfortunately, a rather innocent induction can progress into a disturbing, all-encompassing compulsion. For anorectics, it is not unusual to find that their social activities, work, or both impact the development of their disorder. Those involved in ballet, gymnastics, modeling, or cheerleading seem to have particular pressures to maintain sylphlike figures and often evidence higher levels of eating disorder symptomatology than nonathletes (Holm-Denoma, Scaringi, Gordon, Van Orden, & Joiner, 2009).

One phenomenon frequently observed in individuals suffering from eating disorders is difficulty with interpersonal relationships. Among bulimics, problems in this area are the frequent cause of a binge. Obese children are often social outcasts discriminated against to the point that their social development is impeded. Lacking the rewards of social interaction, some may seek solace through eating. The ways in which social factors may contribute to an eating disorder are varied and often complex. Discerning them is an important part of the diagnostic process.

Interpersonal therapy for bulimics has demonstrated efficacy that may be comparable to CBT. However, the findings are not as robust and interpersonal therapy takes considerably longer (Agras, Walsh, Fairburn, Wilson, & Kraemer, 2000). The National Institute for Clinical Excellence in the United Kingdom in conducting a rigorous review of the treatment literature for eating disorders suggests that interpersonal therapy for bulimia be considered primarily only as an alternative to CBT (NICE, 2004).

14.5.7 Racial Differences

For many years, it had been assumed that eating disorders occurred almost solely among European and European American women, particularly in the upper class.

Thus, investigations into eating disorders among women of color had been sadly neglected. However, new research has shown that women of color are not exempt from developing eating disorders. It is estimated that 1–4% of women of color suffer from anorexia nervosa and bulimia nervosa (Miller & Pumariega, 2001). Moreover, research has shown that BED is common among women of color, particularly among African American women ranging in age from 45 to 54 years (Harris & Kuba, 2001). However, due to a paucity of research in this particular area, diagnostic criteria and therapeutic approaches useful with women of color are lacking.

According to several studies, there are a variety of factors leading to the development of eating disorders in women of color. Factors such as acculturation, peer group identification, and family situations are known to impact the prevalence of eating disturbances among African American women. For example, studies have shown that there is a positive correlation between eating disorders and the separation from one's ethnic culture to the dominant culture (Harris & Kuba, 1997). For example, some cultures such as African American and Latina American demonstrate greater acceptance of a fuller body. But, when the dominant culture suggests a thin ideal body type, conflicts can result between the two cultures, which foster an identity crisis for the individual. When this conflict is internalized, it may lead to the development of an eating disorder (Harris & Kuba, 1997).

Other factors including socioeconomic status (SES) have also been shown to affect eating patterns in women of color. For example, some studies have shown that differences in SES could predict anorectic and bulimic behaviors among African American and Latina American adolescents. Like their Caucasian counterparts, African American women who attained a higher education level and social status were at a higher risk for developing anorexic and bulimic behaviors than African American women who were not as affluent socially and economically (Harris & Kuba, 2001).

Racial differences between black and white women have also been noted using the Eating Disorder Examination Questionnaire. Although no distinctions are seen between healthy females of both racial groups, assessment of clinical samples suggests that black women with BED are less concerned with body weight and shape than their white counterparts. Moreover, black women evidence higher body weight and more frequent binging than white women. Finally, white women with BED are more likely to have a positive history of bulimia nervosa than black women with BED (Pike, Dohm, Striegel-Moore, Wilfley, & Fairburn, 2001). Thus, the clinical picture for white and black female binge eaters may be very dissimilar.

Overall, an assumption on the part of the interviewer of a low prevalence of eating disorders in women of color may produce an inaccurate diagnosis. Moreover, women of color may evidence eating pathologies that do not entirely overlap with the eating disorder symptomatology presented in the DSM-IV-TR, thus complicating the process of making a valid eating disorder diagnosis in women of color. Due to the potential diagnostic problems, Harris and Kuba (1997) have proposed guidelines for increasing the accuracy of diagnosing eating disorders in women of color.

Guidelines for Accurately Diagnosing Eating Disorders in Women of Color[a]

A. Explore the history of eating patterns in the client's family and culture while considering the pattern of differentiation or rejection of the culture by the woman with an eating disorder.
B. Consider the deviation of the client's current eating habits from those expected within her culture and evaluate diagnostically using the cultural expectations as a standard.
C. Be prepared to diagnose specific pathological eating patterns that are self-destructive but are not described by the DSM-IV. These might include ritual dieting binge eating episodes.
D. Examine the client's concept of beauty. Has it changed? When did this change occur? Is this concept congruent with the ethnoculture of origin, or is it primarily related to the expectations of a more oppressive ethnocultural image?
E. Examine self-hatred in relation to ethnoculture. This self-hatred may be expressed metaphorically through the use of food. For example, self-loathing may appear as restricted food intake. Consider that classic symptoms may be modified in women of color who have eating disorders or may appear in entirely different clusters.

[a] From Harris and Kuba (1997)

14.5.8 Gender Differences

Although a higher percentage of women suffer from eating disorders, studies have shown that men are affected by eating disorders as well and that these illnesses are similar between males and females (Eliot & Wood-Baker, 2001). In all likelihood, men are underdiagnosed for eating disorders because many studies involve clinically referred rather than community samples. For instance, Anderson (2001) examined the prevalence rates for anorexia in clinical and community samples of males and reported rates of 5–10% and 16%, respectively. Hudson, Hiripi, Pope, and Kessler (2007) found lifetime prevalence rates for anorexia, bulimia, and BED of 0.9%, 0.5%, and 2%, respectively, among men surveyed as part of the National Comorbidity Replication study. Homosexual men seem to evidence higher lifetime prevalence rates of clinical and subclinical eating disorder symptoms than heterosexual males (Feldman & Meyer, 2007).

Studies of individuals involved in weight-control programs have demonstrated that women are 1.5 times more likely than men to have BED. Male binge eaters tend to evidence a higher BMI and are more likely to be classified as obese while their female counterparts experience greater body dissatisfaction. Males in this group also report a greater frequency of drug abuse (Barry, Grilo, & Masheb, 2001) and psychological problems (Aime, Craig, Pepler, Depeng, & Connolly, 2008).

14.5.9 Physiological Factors

Recent research has suggested that serotonin may play a role in the development of eating disorders in certain individuals. For example, perhaps in an effort to compensate for low serotonin levels, bulimics and binge eaters may consume high quantities of carbohydrates or foods high in tryptophan and low in protein (Foreyt et al., 1998). It has also been noted that medication in the form of antidepressants, which help to produce higher levels of serotonin, given to bulimic clients help to control their bulimic behaviors. The opposite may hold true for anorexic clients. Overly high levels of serotonin are thought to inhibit appetite and thus reduce food intake subsequently resulting in weight loss. However, this hypothesis is based, in part, on the observation that medications which act to increase serotonin are ineffective for anorectics (Foreyt et al., 1998).

Other studies also have observed serotonin levels along with additional neurochemical changes. For example, while bulimic women with and without childhood abuse evidenced low serotonin levels, those with an abusive history also had relatively lower cortisol levels (Steiger et al., 2001). Furthermore, the same study also found a reduced platelet paroxetine binding in women suffering from bulimia nervosa. Although studies like these suggest that physiological conditions may explain symptoms and behaviors in eating disorders, it is still noted that these neurochemical changes may not cause eating disorders. For example, physiological changes may be due to the behaviors demonstrated in eating disorders, rather than vice versa (Foreyt et al., 1998).

Attention also has turned to the contribution of genetics to the development of eating disorders. For instance, Branson et al. (2003) identified a mutation in MC4R which may serve as a marker for binge eating behavior in obese individuals. The bulk of genetic research, however, has focused primarily on anorexia nervosa. In a subsample of restricting-type anorexia clients, chromosome 1p has been identified as a marker for susceptibility (Grice et al., 2002). Further evidence for the implication of serotonin on weight loss behavior was provided by Westberg and colleagues (Westberg et al., 2002) in their examination of adolescent girls with weight loss. Significant differences were noted with regard to 5-HT2C receptors among girls whose weight loss met the criteria for anorexia, girls with weight loss not meeting criteria, and girls devoid of weight loss. A study of Israeli anorectics also found that longer repeat alleles of the hSKCa3 gene, notably associated with various other psychological disturbances, may also play a role in the development of anorexia (Koronyo-Hamaoui et al., 2002). All of these findings should be considered preliminary until further validation is undertaken.

14.6 Dos and Don’ts

Do try to lessen the stigma of eating disorders so that the client may be more willing to disclose symptomatology. This can be accomplished by explaining the prevalence of eating disorders in the population, by explaining how eating disorders are caused by unrealistic cultural norms for body shape and size and the mistaken idea that diets are effective in weight management, and by self-disclosure. For example:

T: I understand that you are here because you feel out of control in your eating. How do you feel about this problem?

P: I guess I have an addictive personality. I am the kind of person who can't control myself.

T: Almost every client tells me what you have just said. But I want you to know that there are hundreds of thousands of people in this country who have exactly the same problem that you have. The problem is caused by the body's natural response to dieting. If you try to breathe really shallowly for a long time, soon you will be gasping uncontrollably for air. Would you blame yourself, or feel like you had an "air addiction?"

P: You mean if I gasped for air after breathing shallowly?

T: Yes.

P: No, I guess not, since anybody would gasp for air.

T: O.K. So you shouldn't blame yourself for "gasping for food" after being on a diet, right?

P: I guess not.

***

T: One thing you need to realize is that you dieted because there is a widespread belief that dieting works to control weight. So you shouldn't blame yourself for dieting. I mean, everybody does it. But now we know that almost everyone who develops an eating disorder, a problem with controlled eating, has a history of serious dieting. Scientists are fairly sure that this is caused by physiological processes, not psychological. In other words you shouldn't blame yourself for your eating-control problems. Now our task is to find out all about your eating control problems so that we can help you do what you need to do to change those physiological processes so you can eat normally.

***

T: I should tell you that I have never been officially diagnosed with an eating disorder, but I can tell you that sometimes when I have to skip breakfast, and have a hectic day at work, that sometimes when I go home I really pig out on bad stuff, like pizza and chips. And I should know better, since I am a doctor! So perhaps I have some of the symptoms of eating disorders, but not quite as serious as most people who come in to the clinic. But I can identify with what you are going through. I mean, I am like you in some ways. You know, we're all in the same boat as women trying to cope with the weird ideas about what we should look like and what we should eat in this society!

Don't imply that the client may have an eating disorder because of some unresolved past sexual trauma, such as incest. There is no evidence for such a direct causality (Pope & Hudson, 1992; Waller, 1991), and bringing up such subjects in the evaluation phase may only add to the client's burden of guilt and shame associated with eating disorders. It may be best to stick to cultural/physiological explanations of eating disorders and let clients reveal any history of abuse later in therapy.

Don't reinforce the notion that the client has a disease and that family members will be consulted to help the client. In eating disorders, it may be best to explain the problem as a cultural/physiological problem in which the client and family members are equally involved as victims.

14.7 Summary

The diagnosis of eating disorders is far more complex than simply checking the criteria listed in the *Diagnostic and Statistical Manual of Mental Disorders*. Their complex nature, multiple etiologies, family dynamics, and highly refractory nature make them exceedingly challenging clinical problems.

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Chapter 15
Psychophysiological Disorders

Ivan R. Molton and Katherine A. Raichle

The term "psychophysiological" has had an interesting and complex history, reflecting changes in the ways in which medical professionals have conceptualized and treated medical illness (e.g., Gatchel, 1993). In the ancient world, a holistic and integrated mind–body view of health was the dominant model. This view was largely based on shared mythology and an unscientific understanding of the human body. However, with the advent of physical medicine in the seventeenth century, an increased emphasis was placed on careful observation and experimentation in explaining physical phenomena. The dominant belief became that the body could be explained through its own mechanisms, and that there was no need for an association between "soul" or "mind" and physical functioning. Although this view allowed for simplistic and unidirectional relationships among psychological and physical states, there was little room for reciprocal interactions among biological, psychological, and social variables. This model (known as biomedical reductionism or mind–brain dualism) remained dominant in the Western world until well into the nineteenth century.

Although the reductionist perspective was perhaps useful during a time when major causes of death were primarily associated with injuries or single pathogens (e.g., tuberculosis, diphtheria), the advent of the germ theory of disease and the development of effective antibiotics early in the twentieth century meant an increase in longevity, and people became more likely to die later in life of chronic and complex illnesses. For example, in 2000, the top ten leading causes of death in the United States included heart disease, cancer, stroke, and diabetes. Clearly, these diseases all include significant psychological and behavioral factors, and are better explained by a model that includes these factors (the "biopsychosocial" model; e.g., Engel, 1977; Schwartz, 1982). In the biopsychosocial model, health (and illness) is influenced by a combination of social, physiological, and psychological factors,

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with no one factor being primary. The relationships among these factors are seen as reciprocal and complex.

This model is particularly helpful in understanding the psychophysiological disorders. Although the meaning of the term “psychophysiological” has changed over time, current consensus defines a physical disorder as being “psychophysiological” if psychological or behavioral factors have a close temporal association with the development or exacerbation of (or delayed recovery from) medical symptoms. Put another way, psychophysiological disorders are characterized by dysfunction in bodily systems that are closely impacted by psychological factors. Although traditionally synonymous with the term “psychosomatic,” it is now viewed as differing from true psychosomatic conditions (such as conversion disorder) in that there is a legitimate presumed (or objectively measured) biological basis for the underlying medical symptoms. In the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, text revision (DSM-IV-TR, American Psychiatric Association, 2000) this conceptualization is subsumed under the heading “Psychological Factors Affecting Medical Conditions.”

In this chapter, we review biopsychosocially derived diagnostic interviewing and assessment procedures for four “classic” psychophysiological disorders: chronic pain, insomnia, headache, and hypertension. We also provide case examples to illustrate important elements of assessment.

15.1 Chronic Pain (Excluding Headache)

15.1.1 Description of the Disorder

The experience of pain is by definition a subjective one, and psychological factors have been shown to play a major role in that experience. Pain is generally divided into two general categories: “Acute” and “Chronic.” Acute pain is generally associated with a temporary state, such as an injury or wound healing. Adaptive strategies for managing acute pain include rest, the use of analgesics, and careful physical activity. Generally speaking, modern medicine is quite good at managing acute pain. However, when pain persists for longer than is expected for normal healing, it is deemed chronic. Chronic pain is notoriously difficult to treat, partly because the approaches that are used to manage acute pain can be maladaptive when applied over a course of time. In one well-known longitudinal study, 64% of persons with chronic pain who were treated by a family physician reported persistent pain 2 years after the start of treatment (Crook, Weir, & Tunks, 1989). Reflecting the complexity of chronic pain, only 15% of primary care physicians report “enjoying” treating patients with chronic pain (Potter et al., 2001). Chronic pain often creates considerable suffering, emotional distress, and physical limitations (e.g., Turk, 2002) and increased pain is one of the most common reasons for seeking emergency medical care (Cordell et al., 2002). Epidemiologic studies suggest that from 11 to 55% of individuals in the United States experience chronic pain (Harstall & Ospina, 2003; LeResche & Von Korff, 1998).

15.1.2 Procedures for Gathering Information

In assessing chronic pain, it is useful to think of the "Pain Onion" (see Fig. 15.1). In this model, the experience of nociception (neural transmission of bodily sensation) is at the core of the pain problem. At the next layer, the brain interprets these sensations as "painful." There is then an emotional response to pain, which varies from individual to individual but may include cognitions ("I can't handle this"; "This hurts but I'll get through") and affective states (chronic worry about pain, depression). Finally, individuals with chronic pain tend to engage in "pain behaviors" that may include wincing, guarding (limited use of parts of the body for fear of reinjury), resting or asking for assistance when in pain, or attempts to mitigate pain via pharmacy or drugs/alcohol. This model is important because it reflects key areas for assessment. Because "nociception" is a physiological domain that requires medical assessment of neural transmission, we will focus on pain, suffering, and behaviors.

A wide number of self-report instruments are useful for measuring the various dimensions of pain, and should be considered alongside a diagnostic interview, weekly "pain log" (described below) and, when possible, family or significant other interview.

Fig. 15.1 "Pain Onion" of pain assessment

15.1.2.1 Assessment of Pain (Intensity, Quality, Location, Duration)

Although pain intensity (the overall magnitude of experienced pain) is most commonly assessed in clinical practice, good pain assessment involves much more than asking patients to rate "how much it hurts." Chronic pain is a complex multidimensional phenomenon, involving not just intensity and location, but also affective (bothersomeness) qualities, different perceptual qualities (e.g., "aching," "electrical"), and temporal characteristics (e.g., steady, intermittent, background versus "flare-up").

15.1.2.2 Pain Intensity

The three most commonly used pain intensity scales are the Visual Analog Scale (VAS), Numerical Rating Scale (NRS), and Verbal Rating Scale (VRS). The VAS consists of a 10-cm line anchored at the low end by the anchor "no pain" and at the high end by "pain as bad as it can be." The patient simply marks the line to indicate pain intensity, and the placement of the mark is measured in millimeters and used to compare to previous assessments. The NRS simply asks patients to describe their pain verbally on a scale of 0 (no pain) to 10 (pain as bad as it can be). The VRS asks patients to choose from a list of words describing current pain intensity (e.g., mild, distressing, horrible, excruciating). Although each of these scales has its own strengths and weaknesses, findings from research across many different pain populations yield fairly consistent findings concerning their psychometric properties (see review by Jensen & Karoly, 2001). Most patients are familiar with the NRS system (0–10), and given its ease of administration we recommend it for use in the clinical assessment of pain intensity.

15.1.2.3 Pain Quality

An excellent self-report measure of pain quality for neuropathic pain is the Pain Quality Assessment Scale (PQAS; Jensen et al., 2006) which includes, in addition to two global rating scales of pain intensity and pain unpleasantness, and two spatial domain measures (deep and surface pain), 16 descriptors (including sharp/cutting, aching, hot, cramping, throbbing, tingling, numb, radiating, and shooting). The McGill Pain Questionnaire (MPQ; Melzack, 1975) is also one of the most widely used general measures of pain and includes a good measure of pain quality.

15.1.2.4 Pain Location and Temporal Characteristics

Pain can occur both at different body locations (e.g., head, leg) and at different depths (e.g., "surface" or "deep" pain). Aside from a clinical interview, the most common self-report strategy used for assessing the body location of pain is the "pain drawing" (e.g., Margolis, Tait, & Krause, 1986) in which patients shade with a pencil their pain location on a body diagram. The temporal aspects of pain, such as its variability, frequency, and duration, as well as its pattern across time (over minutes, hours, days, or months) are probably best assessed by asking patients to complete a "pain log" in which they rate their pain intensity, pain quality, pain triggers, and pain-related coping on multiple occasions over time. The goal is to establish the pattern of pain: Does the individual have intermittent pain (experiencing pain sometimes and being pain free at others) variable pain ("background" pain all the time, but also moments of more severe pain), or stable pain (pain that is constant, with no pain-free periods)? The temporal nature of pain has important implications for overall mood or quality of life. For example, patients who experience periods of pain relief may feel better, overall, than patients who never experience any significant relief.

15.1.3 Pain-Related Suffering

Pain-related suffering involves both the emotional experience of pain (depression, anxiety) as well as the degree to which pain interferes with normal daily functioning (pain interference). Regarding the affective component, standard clinical interview techniques should be used. A number of self-report measures of depression (e.g., the Center for Epidemiological Studies – Depression scale [CES-D] and the Beck Depression Inventory [BDI]) have also been validated for use in patients with chronic pain (e.g., Turner & Romano, 2001). Regarding pain interference, the three most commonly used measures are the Brief Pain Inventory Pain Interference (BPI) Scale (Cleeland et al., 1996), the Interference scale of the West Haven-Yale Multidimensional Pain Inventory (WHYMPI; Kerns, Turk, & Rudy, 1985), and the interference items from the Chronic Pain Grade (GCP; Von Korff, Ormel, Keefe, & Dworkin, 1992). A recent consensus meeting recommended that, in persons with chronic pain in general, either the BPI or WHYMPI measures would be useful measures, given that each assesses pain interference across a number of important activities (Dworkin et al., 2005).

15.1.4 Pain Behaviors

Behavioral analysis is a key to assessment of chronic pain, including antecedents to changes in pain intensity or quality (both positive and negative) as well as behavioral coping with chronic pain. A standard clinical interview for chronic pain should include assessment of behaviors, cognitions or affective states that led to changes in pain intensity, or suffering. Often this kind of information can also be obtained via completion of a "pain log," generally tracked over the course of a week (an excellent log example for physical activity and pain is present in Turner &

Romano, 2001). Behaviors of key importance include “guarding” (restricting the use or movement of a body part to prevent pain), “resting” (lying down or sitting), “asking for assistance” (asking for help with a task to avoid pain), “task persistence” (persevering in a task despite pain), “exercise/stretching” (using muscle stretching or physical activity to prevent pain), “coping self-statements” (intentionally thinking positive or affirming thoughts about pain and one’s ability to handle it) and “seeking social support” (talking with a friend or loved one when in pain). Some of these domains are conceptualized as being generally maladaptive and therefore discouraged (guarding, resting, asking for assistance) whereas others are generally adaptive and therefore encouraged (coping self-statements, task persistence, exercise, seeking social support) in pain treatment programs (Jensen, Turner, Romano, & Strom, 1995). One standardized instrument for assessment of coping in chronic pain populations is the Chronic Pain Coping Inventory (CPCI; Jensen et al., 1995).

Assessment of chronic pain must also include an assessment for primary and secondary gain factors. Whereas these may include overt rewards (such as disability compensation, litigation, and use of narcotic medications) more commonly chronic pain patients are reinforced by subtle factors which they may or may not be aware of (including sympathy, attention, and a socially acceptable “time out” from labor or unpleasant activity). These factors are key in understanding the maintenance of chronic pain over time.

15.1.5 Case Illustration

The following interview was taken from an initial diagnostic interview for chronic pain. The patient is a 49-year-old man with “failed back surgery syndrome” (FBSS) following multiple laminectomies. At the time of the interview, he had applied and been denied compensation for disability. He is married and has two young adult children. There is no significant psychiatric history with the exception of some binge drinking in his early 20s. Parts of this interview (e.g., an assessment for major depression) have been edited for space.

I: Thank you for completing these questionnaires and the ‘pain log’ this week. I feel like I have a pretty good beginning understanding of your pain problem, but I’d like to ask you more about it. Let’s start by having you tell me a little more about your pain and how it affects you.

C: Sure. I guess it all started after I hurt my lower back lifting a pallet back in March of ‘02. I herniated a disk pretty bad. I got a couple of surgeries for it, but that didn’t seem to help. Now I have this really bad pain in my leg… It’s like sciatica. It’s like my whole leg is on fire. And my back aches all the time. Mostly my lower back.

I: I see. Can you rate your pain for me right now, from 0-10, with ‘0’ meaning ‘no pain at all’ and 10 meaning ‘the worst pain you’ve ever experienced?’

C: Sure, I get asked that all the time. Right now it's about a 5.

I: Tell me what a '5' means to you. [Note: determining patient scale anchors is important in understanding their ratings].

C: Well... With a 5 I can talk, I can sort of limp around. I can't work. I don't normally take a pain pill until it's about an 8.

I: OK. In the past week, what has your average pain level been?

C: I'd say a 4.

I: And what was the worst pain you experienced?

C: A 10, definitely a 10.

I: Sounds like your pain can change.

C: Yeah, it's always there, but sometimes it really spikes up.

I: Are there particular times when the pain spikes up?

C: Sure, if I have to do something really physical, like carry groceries or mow the yard, I can count on the pain spiking up there the next day. And it's usually worse at night. Sometimes I can't sleep.

I: I see. Are there particular times when the pain isn't as bad?

C: Well, yeah, if I'm really distracted by something going on, like if my grandkids are over or if there's something good on TV, I hardly notice the pain at all.

I: OK. Can you tell me a little about what you do to manage your pain?

C: I've tried everything! Mostly now I use a heating pad at night, and I take tylenol PM's 3 times a day. I also have some oxycodones I can take if the pain gets worse. My doctor tried to give me percocets, but I'm worried about getting addicted to those.

I: And when you're in pain, do you do anything differently?

C: Well, yeah. I usually just lie on the couch. My wife is really helpful, she'll bring me anything I need. Actually, that's another thing. My wife is really great, but she's not asking as much of me anymore. I don't have to help out around the house or do any work. It's tough though, because I know I'm not doing enough physically. I've put on about 20 pounds since I got hurt, and that doesn't help the lower back. But exercise seems to make it all worse. I feel like a big slug.

I: And how has all this affected your mood?

C: Well, I'm depressed. I mean, wouldn't you be? I can't do anything anymore. And I get really snappy with my family when I'm in pain. I've even started not doing things with friends, because I don't want them to feel sorry for me.

I: And what are your drinking habits like?

C: Yeah, that's the other thing. I'm drinking about 4 beers a night now. It helps with the sleep.

I: And what is the impact of the beer on the pain?

C: It helps in the moment, but the next day I'm hungover, which makes the pain worse. And my wife is worried about my drinking.

Although this illustration only provides a small part of the interview, the information that this patient is presenting suggests that he suffers from variable pain, of baseline moderate severity, and suggests a number of problematic behavioral adaptations including soliciting help from his environment, inactivity and resting in response to pain, and problematic alcohol use. Although not presented here, this patient also met criteria for major depressive episode. This group of reciprocally interactive symptoms (pain–depression–substance use) is very common in patients with chronic pain.

15.1.6 Recommendations for Formal Assessment

Because chronic pain is a complex problem, a combination of self-report instruments in conjunction with a thorough clinical interview is recommended. One helpful technique is a "tailored" approach in which patients complete a few diagnostic pain measures (such as the McGill Pain Questionnaire and the Chronic Pain Coping Inventory) as well as a "pain log" prior to an unstructured interview. This saves time and allows the interviewer to tailor the interview to areas of particular importance to the patient.

15.1.7 Standardized Interview Formats

A limited number of semi-structured interviews are available for chronic pain, including the Psychosocial Pain Inventory (Heaton et al., 1982). Additionally, interview models are described in Karoly and Jensen (1989) and Gatchel (2000).

15.1.8 Impact of Race, Culture, Diversity, and Age

Older adults are much more likely than are younger adults to experience chronic pain, and to report greater duration of pain and more pain locations. However, the literature suggests that older adults also report less "impact" of pain on mood and functioning as compared to younger adults, perhaps as a result of accommodation to pain over years or through age-related beliefs about the "normalcy" of chronic pain in later life (e.g., Riley, Wade, Robinson, & Price, 2000; Williamson, 1998). There is evidence for racially based discrimination in treatment of pain (with whites receiving greater quality of care than African-American, Latino, or Asian patients; e.g., Pletcher, Kertesz, Kohn, & Gonzalez, 2008) and that perceived discrimination in African-American patients is associated with greater report of chronic pain (Edwards, 2008).

15.1.9 Information Critical to Making a Diagnosis

The relevant DSM-IV-TR disorder to be considered here is pain disorder associated with psychological factors . To make this diagnosis, it is necessary to establish (a) that pain is the predominant feature of the clinical presentation, (b) that the pain is associated with distress or impairment, (c) that the pain is associated with psychological factors in terms of duration, severity, exacerbation, or onset, and

(d) that the pain is not *intentionally* feigned. Naturally, pain disorder is not diagnosed if the pain is better accounted for by a mood, anxiety, or psychotic disorder. Although these criteria are helpful in establishing a diagnostic framework, the label itself is not generally useful in informing the patient or shaping treatment. Rather, interviewers are encouraged to focus on factors present in criterion c, and in particular on behavioral factors that exacerbate or maintain pain.

15.2 Insomnia

15.2.1 Description of the Disorder

Difficulties in sleeping are very common. Approximately 50–80% of the US population will report difficulties in initiating or maintaining sleep in a given year (e.g., Becker, 2006). When these problems become long-standing, severe, or lead to significant impairment in daytime functioning, a diagnosis of chronic insomnia is made. Patients who have chronic sleep problems begin to dread the night and worry about daytime consequences (fatigue, mental cloudiness, and irritability). Not surprisingly, chronic insomnia, which is frequently comorbid with major depression, dysthymia, and anxiety disorders, is associated with significant impairment in social and occupational functioning, and can even become life-threatening. Although prevalence of chronic insomnia is difficult to determine based on differences in assessment criteria, estimates range from 10 to 28% in the US population (Ohayon, 2002).

Diagnostic criteria from the DSM-IV-TR include problems with sleep onset, maintenance, early awakening, or nonrestorative sleep (sleep that does not lead to a feeling of being rested) on more than half of the days in past month, and significant associated daytime dysfunction that impairs performance of activities at home or work (APA, 2000). Insomnia is generally considered to be primary (not due to a medical condition or to the direct effect of substances) or resulting from medical conditions (such as restless leg syndrome or sleep apnea) or from the direct effect of substances (primarily, stimulants). A number of factors may lead to primary insomnia, including “psychophysiologic” factors (somaticized tension and learned sleep-preventing associations and behaviors) “sleep hygiene” factors (excessive daytime napping, keeping irregular sleep hours) and neurological (“idiopathic”) factors, which tend to present in childhood and are thought to be caused by biological abnormalities in the sleep–wake system.

In clinical practice, the distinction between “primary” insomnia and other forms (sleep disorder due to GMC, insomnia type; substance-induced sleep disorder, insomnia type) can become somewhat academic, as most individuals with sleep problems also have comborbid health concerns and vice versa (e.g., Katz & McHorney, 2002) and a large number of people with sleeping problems will attempt to compensate for sleeplessness with stimulants (particularly, caffeine). The diagnostic distinction must be made based on the interviewers belief as to the primary causal factor in the insomnia (i.e., whether it is the “direct” result of medical or pharmacological factors).

Table 15.1 Factors contributing to sleep problems by time of night

Insomnia type	Potential causal/influencing factors
Early insomnia (sleep onset)	*Psychological factors*
	Conditioned response (e.g., associating bed with sleeplessness)
	Anxiety disorders
	Ruminative worry
	Major depression
	Medical factors
	Restless leg syndrome
	Chronic pain (including neuropathic pain)
	Gastroesophageal reflux disease
	Environmental factors
	Simulants (caffeine, nicotine, pseudoephedrine)
	Unpredictable sound/lighting (such as from TV)
	Late night eating
Middle insomnia (sleep maintenance)	*Psychological factors*
	Major depression
	Anxiety disorders (particularly panic disorder and PTSD)
	Medical factors
	Sleep disordered breathing (typically obstructive sleep apnea, marked by snoring)
	Chronic joint pain (particularly hips and back)
	Cardiovascular disease (particularly pain from angina)
	Restless leg syndrome
	Waking frequently to urinate
	Environmental factors
	Sleep disturbed partner
Late insomnia (early awakening)	*Psychological factors*
	Major depression
	Anxiety disorder (particularly panic disorder)
	Anxiety surrounding work day
	Medical factors
	Advance sleep phase syndrome
	Environmental factors
	Dramatic lighting changes

One key area in the assessment of insomnia is an understanding of the time of night that sleeplessness presents, as this timing typically reflects different underlying physical, psychological and environmental causes. Most cases of insomnia are associated with sleep onset (approximately 75%, Lacks, 1987). A list of common causes of insomnia by type is presented in Table 15.1.

15.2.2 *Procedures for Gathering Information*

Sleep complaints represent a multifaceted problem that requires assessment of a range of physiological, environmental, and psychological factors. Thorough assessment should include interviewing of the patient as well as his/her sleeping partner, a medical examination (including all-night polysomnography when possible), daily logs of sleep, and measures of associated daytime disruption.

Because psychological conditions have a cyclical relationship with sleep problems, a thorough diagnostic interview is tremendously important. Psychological problems are both a cause and an effect sleep deprivation. For example, biologically, there is evidence that mood and anxiety disorders may affect neuroendocrine systems associated with sleep, and behaviorally, persons struggling with depression are more likely to have chaotic daily schedules and to engage in sleep-interfering behaviors (such as substance use). Problems with ruminative worry (as is commonly associated with major depressive disorder) are associated with problems in "turning the mind off" and initiating sleep, and nightmares and/or nocturnal panic attacks associated with posttraumatic stress disorder (PTSD) can prevent middle sleep. Similarly, sleep deprivation can lead to problems in work and social relationships, and may induce subjective anxiety through disruption of the REM cycle.

15.2.3 Case Illustration

The following dialog is an excerpt from a diagnostic interview in an outpatient medical clinic. The patient is a 36-year-old, married, Caucasian woman who suffered a stroke (affecting memory and strength on the left side of her body) approximately 2 years prior to the interview. She presented with concerns with depression, and the assessment for insomnia is presented here.

I: So about your sleep… Tell me a little more about the kinds of problems you're having.

C: Well, I tend to wake up way too early. I mean, like 3:30 or 4:00 in the morning, and I can't get back to sleep.

I: And do you have problems in falling or staying asleep prior to waking?

C: Yeah, it's hard to fall asleep. Sometimes it takes me a couple of hours. I'm just tossing and turning, with a million things going through my head, thinking "I know I need to get some sleep for tomorrow… Why can't I sleep?"

I: So how many hours of sleep would you say you're getting, total, per night?

C: Oh, maybe 4 or 5.

I: I see. And can you tell me a little about how this started? When did you first notice the sleep problems?

C: Well, I've never been a good sleeper… And I've had periods of insomnia throughout my life. My parents could never get me to go to bed. It's been worse since the stroke, because sometimes pain will keep me awake. But really it just got much much worse about 2 months ago. That's when I talked to my doctor and she got me that sleep study.

I: Yes, I've reviewed that study (which confirmed interrupted and abbreviated sleep but was negative for apnea and other conditions). Can you tell me, was there anything in particular that seems to have triggered this bout of insomnia?

C: Not that I can think of. Things have been pretty stressful around the house, and now that I'm getting a little better (with recovery from the stroke) Jim is asking me to do more. I do worry sometimes that I won't get enough function back to be completely independent again.

I: OK. So you worry about returning to independence.

C: Yeah. And it's usually at night that I worry the most... I just can't stop thinking about all the things I'll have to do tomorrow, and then I realize I'm not sleeping, and then I start worrying about how I need to get enough sleep in order to do the things I have to do. I sit there thinking "you have to get some sleep!" It's a big circle.

I: And what kinds of things do you do to stay awake during the day?

C: Coffee, coffee. I drink about 6 cups a day now. It's gotten to the point where I can't get out of bed without drinking a cup first. My doctor prescribed Provigil, and that helps a little.

I: And can you tell me a little about how your mood has been?

C: Lousy and getting worse. I'm irritable and snappy with Jim, and I'm feeling more and more depressed, especially in the mornings. I'm not sure this is ever going to get better.

Although this is a small piece of the full interview, this patient is clearly presenting with insomnia that is related to chronic worry and catastrophizing of sleeplessness. She appears to be compensating with stimulants (Provigil and caffeine) and chronic sleeplessness is beginning to take a toll on her mood and relationships.

15.2.4 Recommendations for Formal Assessment

As is true of most psychophysiological disorders, a good clinical interview supplemented by self-report measures (in this case, a 7-day sleep diary) and collateral interviews (family members and medical staff, as appropriate) is indicated for chronic insomnia.

15.2.5 Standardized Interview Formats

One standardized measure for consideration is the Structured Sleep History Interview (Lacks, 1987). Also, although not technically a standardized interview, one excellent model for conducting an insomnia assessment is presented in Becker (2006) and is called the "6 Ps + M" model. This model is a systematic way of thinking about insomnia assessment, and emphasizes seven areas: Predisposing factors, precipitating factors, perpetuating factors, psychiatric factors, pharmacological factors, periodicity/circadian factors and ("plus") medical disorders (such as apnea or chronic pain). Predisposing factors include a heightened baseline state of physiological arousal, genetics for short sleeping, and personality factors that influence reactivity to stress. Examples may include a biological tendency to anxiety or panic or a perfectionistic personality style that leads an individual to catastrophize normal sleeplessness. Precipitating factors are events that are temporally associated with the onset of insomnia (and can include traumatic events, more normative stressors or temporary alterations in the sleep wake cycle due to travel or substances). Once insomnia is established, it is maintained by perpetuating factors, which are cognitions and behaviors associated with poor sleep (for example, conditioned association of the bedroom with sleeplessness and negative self-talk surrounding sleeping problems). Psychiatric factors include Axis I and Axis II disorders that are associated with sleep disruption (most commonly, major depressive disorder or generalized anxiety disorder). Phamacological factors are routinely taken medications or substances that interfere with sleep. Although many prescribed medications can cause sleeplessness, most commonly individuals with chronic insomnia attempt to compensate with use of legal stimulants (caffeine, nicotine, and in some cases over-the-counter antihistamines such as pseudoephedrine). This creates a cycle of sleep deprivation and can lead to physiological addiction. As is true of any clinical assessment, it is important to evaluate use of illegal substances, as virtually all will interfere with sleep. Periodicity/circadian factors include the normal circadian rhythms of the human body (which may vary somewhat by individual) and elements that disrupt these (such as shift work). Medical factors are important in assessing insomnia and a full medical evaluation is key.

15.2.6 Impact of Race, Culture, Diversity, and Age

Sleep problems are more prevalent in women and those of lower socioeconomic status (Ohayon, 2002). Insomnia is also more frequently reported by older adults (Bixler et al., 1979).

15.2.7 Information Critical to Making a Diagnosis

For a diagnosis of “primary insomnia” the interview should ask specific questions to establish that the sleep disturbance meets Lacks (1987) criteria. These include sleep onset latency of more than 30 min (or) more than 30 min spent awake during the night (or) less than 6½h of sleep per night, with symptoms for at least three nights per week and occurring for at least several months and leading to daytime fatigue, and decreases in mood and performance. Rule out criteria for primary insomnia include sleep problems that result directly as a result of physical illness, occur solely during a mood, anxiety, or psychotic episode, or are the direct effect of substance use. Diagnoses of narcolepsy or parasomnia are also rule-outs for a diagnosis of primary insomnia by the Lacks criteria. DSM-IV-TR criteria are almost identical, with the exception that sleep problems are more broadly defined (“difficulty initiating or maintaining sleep, or nonrestorative sleep, for at least 1 month”) and must lead to distress or impairment.

As a caveat to the above, although these criteria are important to establish specific diagnostic labels and differentiate the effects of medical conditions, the experienced interviewer will consider the insomnia assessment as a foundation for treatment, and will take an integrative biopsychosocial perspective to understanding insomnia (such as the 6 Ps + M model).

15.3 Headache

15.3.1 Description of the Disorder

Headache is the most frequently reported source of chronic pain as well as the most common reason individuals seek treatment in outpatient neurology (e.g., Mannix, 2001). The two most common types of headaches are migraine and tension.

Migraine is a paroxysmal disorder, characterized by attacks that are separated by asymptomatic periods. Migraine pain is typically unilateral, frequently starting around the eyes, radiating to the frontal and temporal regions and/or entire head. Pain is often described as severe, throbbing and/or pulsating, lasting from 4 to 72 h (Lipchik, Holroyd, & Nash, 2002). However, pain represents only one aspect of the disorder. Other common reported symptoms include nausea and vomiting, photo and sound-sensitivity, irritability, anorexia, diarrhea, lightheadedness, and scalp tenderness. Migraine is classified as with or without aura (International Headache Society; IHS, 2004), which can be described as focal neurological symptoms. This most often includes visual disturbances, representing 90% of patients with auras (Melzack & Wall, 2003). According to one study, approximately 5% of persons experience lifetime prevalence of migraine with aura, while migraine without aura evidenced an 8% lifetime prevalence (Rasmussen, Jensen, Schroll, & Olsen, 1991). Approximately 10% of patients with migraines experience prodromal symptoms, including changes in mood, recurring yawning, and/or craving particular foods, and attacks can be followed by "postsyndromes" such as fatigue (Schoenen & Sandor, 2003). There is no gender difference in migraine prevalence for children (Bille, 1962; Chu & Shinnar, 1991), yet women experience migraines at a rate two to three times more often than men after the age of 16 (Stewart, Lipton, Celentano, & Reed, 1992). The international prevalence of migraine ranges between 15 (Rasmussen, Jensen, Schroll et al., 1991) and 23% (Stewart et al., 1992).

Tension-type headache is a heterogeneous group whose very name underscores the uncertainty regarding pathology, but intones the possible impact of mental processes or muscular tension (Schoenen & Sandor, 2003). This type of headache is characterized by bilateral feelings of dull achiness, "pressure," or "cap-like" or "band-like" pain, located in the forehead, neck and/or shoulders, lasting from 2 to 7 days per week, ranging from 1 h to all day. In one population-based study, Rasmussen, Jensen, Schroll et al. (1991) found that lifetime prevalence of tension-type headache is as high as 79%, with as many as 3% of their sample experiencing a headache on more than 15 days per month.

15.3.2 Procedures for Gathering Information

A comprehensive assessment of headache includes both a clinical interview coupled with administration of standardized tests/self-report measures. An assessment will typically consist first of a medical evaluation (see Sect. 15.3.7 below) to rule out headache as secondary to an underlying structural abnormality or disease process. Next, a diagnostic evaluation for primary headache will use both interview and standardized assessment instruments to gather necessary information.

Overall, instruments may be used initially to assess for the presence of comorbid psychiatric disorders, including the extent of depression and anxiety, the level of headache-related disability, and the impact of headache pain on psychosocial aspects of life, including family and social functioning. Suggested instruments include the PRIME-MA Patient Questionnaire (Spitzer et al., 1994) as well as standard screens such as the State-Trait Anxiety Inventory, Beck Anxiety Inventory, and Beck Depression Inventory. Suggested instruments to evaluate the impact of headache on work, family, and social functioning, as well as disability, include the MIDAS (Stewart, Lipton, Kolodner, Liberman, & Sawyer, 1999) and Headache Disability Inventory (Jacobson, Ramadan, Aggarwal, & Newman, 1994), respectively.

The clinical interview builds upon the information gathered from assessment instruments for a formal diagnostic headache evaluation. This evaluation includes a history to identify the frequency and pattern of headache pain, antecedents of headache pain, the behavioral and psychosocial consequences of reporting headache, as well as treatment history (including medication management, use of emergency services, and alternative therapies).

Finally, the evaluation also includes an assessment of current symptom clusters of the headache pain to differentiate migraine from tension, as an example of the most common differential diagnosis. A suggested testing instrument for headache symptoms includes The Headache Symptom Questionnaire (Arena, Blanchard, Andrasik, & Dudek, 1982). Gathering psychosocial history, as well as family history of headache pain is important.

15.3.3 Case Illustration

The patient described below is a 45-year-old man who has suffered from headache since he was a teenager. He had yet to seek specialized treatment for headache, but as a consequence of worsening pain within the last year, he was motivated to discuss his pain with his primary physician who referred him for a specialized comprehensive evaluation. The template for questions was taken from Blanchard and Andrasik (1985). This is a case of classic migraine.

I: Could you please describe for me your headache in detail?

P: The best way to describe the pain is as a sharp and shooting pain, sometimes throbbing.

I: Where on your head does the pain start?
P: The pain starts in the front, on the right side of my fore head and spreads over to the entire right side of my head within an hour or so from starting.
I: Does the pain ever occur on the left side, or on both sides of your head?
P: Mostly the pain is localized to the right side, but very rarely I will feel the pain all over my head, on both sides.
I: How long does the headache last?
P: The headache pain is somewhat variable, but generally it will last from 4 to 6 hours and sometimes for as long as several days.
I: How often do they occur?
P: About, on average, one per week.
I: How many have you had in the last month?
P: I've had between 10-12 in the last month.
I: Is there any type of warning sign or any symptoms before you are going to have a headache?
P: Often I will see zigzagging lines in my visual field and sometimes part of my visual field will be blotted out.
I: Are the spots stationary, or do they move when you move your eyes?
P: They move when I move, but if I focus my eyes on something they will be stationary.
I: Do you experience nausea before, during, or after a headache?
P: Sometimes.

This interview illustrates someone with class migraine that is relatively severe. The interview should continue with an evaluation of antecedents of headache pain, including current life stressors and circumstances that may precede the onset of a headache, such as stressful interactions at work or in a relationship, for example. An evaluation of concurrent psychiatric symptoms is also necessary.

15.3.4 Recommendations for Formal Assessment

As stated above, assessment calls for both self-assessment tests and a diagnostic interview. The most efficient approach would include the initial administration of test instruments to assess the presence of comorbid psychiatric disorders, level of headache-related disability, and the impact of headache pain on quality of life, including family and social functioning. This is typically followed by a diagnostic interview tailored to the needs of the patient and dictated, in part, by the responses to the assessment instruments. This includes additional history of headache symptoms and related sequalae as described above. Finally, daily self-monitoring over a period of 1 month provides additional valuable information that may be used to inform treatment recommendations. This includes headache activity upon rising and at lunchtime, dinnertime, and bedtime. The reader should be cautioned against relying exclusively on self-assessment measurements to gather diagnostic information about headache pain (see Rasmussen, Jensen, & Olsen, 1991).

15.3.5 Standardized Interview Formats

There are few standardized interview formats to evaluate headache pain, but Blanchard and Andrasik (1985) describe an approach to diagnostic interviewing that meets the goals of the aforementioned diagnostic interview. The diagnostic headache evaluation should follow the IHS classification criteria (IHS, 2004).

15.3.6 Impact of Race, Culture, Diversity, and Age

There are many considerations regarding the impact of race, culture, diversity, and age on the diagnosis and treatment of headache. In terms of migraine, younger children, typically below the age of 12, will present with attacks of a shorter duration, gastrointestinal symptoms may predominate, or may present with unremarkable associated symptoms (Schoenen & Sandor, 2003). Tension-type headache is the most common primary headache disorder in adults, peaking in the fourth and fifth decade of life. International migraine prevalence is generally lower in African populations (Osunktokun et al., 1982), as well as indigenous Asian populations (Zhao et al., 1988), when compared to Caucasians (Rasmussen, Jensen, Schroll et al., 1991; Stewart et al., 1992, 1995).

15.3.7 Information Critical to Making a Diagnosis

Distinguishing episodic tension-type headache from migraine is notoriously difficult in light of the fact that each often accompanies features often seen in the other (Stewart et al., 1995). Thus, a careful diagnostic evaluation, considering these differences, is critical. According to the criteria outlined by the IHS (IHS, 2004), the diagnosis of tension-type headache is made primarily upon the presence of negative symptoms (e.g., the absence of photophobia) whereas migraine is typically characterized by positive symptoms (i.e., photophobia, phonophobia, nausea and/or vomiting).

A medical evaluation is necessary to rule out headaches as a process secondary to a disease or abnormality in structure. Typically, secondary headaches are associated with several key symptoms or “red flags” including a sudden onset, recent head trauma, symptoms that are changing or progressing or associated with neurological symptoms (except those typically associated with migraine), a fever or signs of infection, or when the headache presents as a new onset in a patient over the age of 50.

15.4 Hypertension

15.4.1 Description of the Disorder

Hypertension is defined primarily by elevated systolic pressure (force exerted during contraction of the heart's ventricles) and, to a lesser extent, diastolic pressure (pressure in the arteries when the heart is relaxed). Mild hypertension is defined by systolic pressure between 140 and 159 mmHg; moderate hypertension is between 160 and 179 mmHg; and severe hypertension is pressure consistently above 180 mmHg. Hypertension occurs both from excessive cardiac output, placing strain on the arterial walls, and/or as a consequence of peripheral resistance.

Hypertension is often asymptomatic with dangerous physiological consequences, including increased risk of kidney failure, stroke, coronary heart disease, other cardiovascular dysfunction, and cognitive deficits. According to recent estimates, approximately one-third of US adults have high blood pressure, while almost one-third are unaware that they meet criteria for hypertension (American Heart Association, 2008). Approximately 5% of hypertension diagnoses are the consequence of a failure of the kidneys to regulate blood pressure. Essential hyptertension, or hypertension of unknown origin, constitutes approximately 90% of all diagnosed cases (Mohrman & Heller, 1991). There is strong evidence for a genetic vulnerability to developing hypertension, with greater than 50% concordance in twin samples, representing rates that are stable across the lifespan (e.g., Beekman et al., 2002). There is also strong evidence that genetic vulnerability is explained, in large part, by heritability of trait responses to stressful events (DeQuattro & Lee, 1991).

15.4.2 Procedures for Gathering Information

Normally, referral to a psychologist or mental health practitioner *follows* a diagnosis of hypertension (Blanchard, Martin, & Dubbert, 1988). Evaluation with a psychologist should focus, therefore, on the correlates and antecedents of hypertension, including behavioral risk factors of hypertension (i.e., diet, exercise, drug and alcohol use, smoking, and sodium intake) and psychosocial indices that contribute to an increased risk (i.e., stress, stress reactivity, anger, suppressed hostility, depression, and anxiety). Although there are numerous behavioral and psychological factors to consider, a comprehensive medical evaluation is an essential first step.

Central to an assessment of risk factors for hypertension is an evaluation of high-risk behaviors, such as poor diet (e.g., sodium intake), lack of exercise, drug and alcohol use, and smoking. Information gathered from an interview may be supplemented from self-monitoring. Patients are instructed to keep a daily record of diet, including sodium intake, drug and alcohol use, smoking, and exercise activity. Moreover, self-monitoring may include keeping a record of stress and anxiety level coupled with blood pressure monitoring. Blanchard et al. (1988) provide standardized procedures for tracking blood pressure at home.

Certain personality and psychological characteristics have been implicated in increasing the risk of developing hypertension. One of the strongest psychosocial correlates of emergent hypertension is *stress reactivity*, marked specifically by elevated sympathetic nervous system (SNS) reactivity in response to stressful events (Matthews, Woodall, & Allen, 1993). There is also substantial evidence that ruminating on the source of anger is associated with acute elevations in blood pressure, thus an assessment may consider reactivity in the face of an event, but continued rumination (Everson, Goldberg, Kaplan, Julkunen, & Salonen, 1998). Moreover, there is research linking certain types of *Type A behavioral patterns*, specifically the hard-driving behavior pattern (Sanz et al., 2007), *suppressed hostility* (Everson et al., 1998; Zhang et al., 2005), and *anger* (Rutledge & Hogan, 2002) to increased risk of hypertension.

There are several useful instruments to assess traits of Type A personality, anger expression, and suppressed hostility, including the State-Trait Anger Scale (Spielberger et al., 1983), the Buss–Durkee Hostility Inventory (Buss & Durkee, 1957), the Novako Anger Scale (Novako, 1975), and the Cook–Medley Hostility Scale (Cook & Medley, 1954).

Another important component of assessment is the prevalence of stressful life events. Research has shown that exposure to stressful life events, coupled with high SNS reactivity, may contribute to the development of hypertension (Carroll et al., 2001). Thus, one may consider the combined impact of reactivity and significant life stressors. Specific types of stressors linked to an increased risk of hypertension include chronic social conflict and job stress, specifically circumstances that combine high demand with little or no control (Pickering et al., 1996). Finally, there is evidence that both depression and anxiety are risk factors for developing hypertension (Jonas & Lando, 2000) and these should be assessed using clinical interview and self-report instruments.

15.4.3 Case Illustration

The following patient is a 40-year-old Caucasian man referred to a psychologist for evaluation of behavioral and psychological antecedents to his hypertension. This was to inform psychological treatment in conjunction with a recently established pharmacological regimen.

I: What is the highest your hypertension has ever gotten?

C: About 170 over 110.

I: Are there any accompanying symptoms that let you know that your blood pressure is high?

C: I feel flushed and sometimes I can feel my heart racing.

I: Now I want you to think about a time when you had those same symptoms, when you weren't self-monitoring, and what the circumstances were.

C: I think the times when I feel most physically agitated are at work. I don't know if my blood pressure is up or not, but the feelings of being flushed and having a racing heart are not uncommon for me at work.
I: Are there specific circumstances at work when you feel these sensations?
C: I don't know if they are circumstances or people. What I mean by that is that I have very difficult interactions with my boss, who is a micromanager and total jerk.
I: Tell me more about your interactions.
C: Well, he will regularly call me into his office to inquire about our sales quota, offer no encouragement, and suggest that I should be doing more, and how I should be doing it, even though there is physically no way that I can do more. I have a co-worker who knows when I've been in his office and avoids me until I've visibly calmed down.
I: About how long would you say that it takes you to calm down when he's angered you?
C: I have to say, I often want to punch a hole in the wall and it takes me quite a while to calm down afterwards if he's really gotten me going.
I: Do you do anything in particular that helps you calm down?
C: I don't know what to do. I usually have to wait for it to pass. Once I was so mad that I left work and went to the parking lot and screamed profanities. I know that sounds ridiculous, but I couldn't help myself. I wanted to punch someone.

This individual is reporting a number of behavioral patterns that accompany risk for hypertension, including high physiological reactivity in the face of stress. The interviewer should continue exploring if this reaction is typical only at work, or if this generalizes to other stressful events in the person's life, as well as the number of events he is experiencing, on average, each day/week/month.

15.4.4 Recommendations for Formal Assessment

Hypertension is a psychophysiological disorder likely impacted by multiple behavioral, psychological, and biological processes, thus a combination of self-report instruments supplemented by a thorough clinical interview is recommended. As mentioned in previous disease assessments, one helpful technique is a "tailored" approach in which patients complete a few diagnostic measures prior to an unstructured interview. This saves time and allows the interviewer to tailor the interview to areas of particular importance to the patient.

15.4.5 Standardized Interview Formats

There are a limited number of interview formats available to assess the psychosocial and behavioral indices of hypertension. Rosenman (1978) developed a structured interview to assess coronary-prone behaviors. This interview is designed to evaluate behavioral demonstrations of anger and irritability, as well as strength of handshake, speech patterns, and motor pace, as indices of Type A behavior patterns. The interview also assesses patient-reported experiences of time pressure, drive, and ambition. The only interview specifically assessing behaviors related to hypertension was developed by Blanchard et al. (1988) designed to assess blood pressure history, medical regimen, life stressors (social, marital, and work), exercise, diet, smoking, and psychopathology.

15.4.6 Impact of Race, Culture, Diversity, and Age

Hypertension disproportionately affects African-American communities, which is believed to reflect higher levels of stress associated with racial discrimination and their disproportionate representation in populations of lower socioeconomic status (Blascovich, Spencer, Quinn, & Steele, 2001). There are also documented differences, by race, in neuropeptide and cardiovascular responses to stress that may, in part, explain this disparity (Saab et al., 1997). Compared with white women, Hispanic women and African-American women have higher BP, which is likely related to overall greater body mass index, lower physical activity, and higher rates of diabetes (Winkleby, Kraemer, Ahn, & Varady, 1998). Finally, hypertension is known to account for a significant greater number of deaths in women than men (American Heart Association, 2008).

15.4.7 Information Critical to Making a Diagnosis

As previously stated, a diagnosis of hypertension often precedes assessment by a psychologist, ideally accompanied by a thorough medical evaluation. The evaluator is encouraged to consider the multidimensional aspect of hypertension, assessing for each of the biological, psychological, behavioral, and social aspects that all may play a role in the development or perpetuation of hypertension, as well as recognition of both the strengths and limitations of psychological interventions and the importance of concurrent medical care.

15.5 Dos and Don'ts

15.5.1 General Caveats and Guidelines

Assessing patients who present with psychophysiological problems can be challenging, and a number of general guidelines are worth consideration.

1. As is true in any psychological assessment, establishment of rapport is critical in evaluating individuals who present with psychophysiological disorders. This patient population often presents with a built-in barrier to rapport – they are generally referred when medical staff are unable to explain the nature or severity of their symptoms. By the time these individuals arrive for psychological evaluation, they may have seen a number of specialists to explain medical symptoms without satisfaction. Depending on the communication skill of the provider and the psychological sophistication of the patient, the meta-message of this process is at best "I don't think I can help you" and at worst "I think maybe you're exaggerating or making up your symptoms."
2. Similarly, interviewers must be aware of their own biases and judgments when presenting the biopsychosocial model to patients. Even when this model is presented with sophistication and understanding, it is often difficult not to inadvertently communicate the message "I think you're creating or exacerbating these symptoms because you don't manage your stress well."
3. It is easy to fall into the trap of "playing physician" with patients who present with psychophysiological problems. It is wise to remember that although a full assessment of the specific physical nature of a patient's health problem is important, it should not be the sole focus of evaluation. This is particularly true when a patient has undergone multiple evaluations and diagnostic workups from medical professionals prior to appearing for assessment. The focus of the clinical interview should be on psychological, behavioral, social, and emotional influences on physical symptom presentation, (that is, the "psycho" and "socio" parts of the model) rather than the biological factors.

15.5.2 Specific Dos and Don'ts

DO:

Talk with the referral source regarding the patient's medical history.

Use the interview to establish a link between cognitions, behaviors, affective states, and the impact of physical symptoms.

Think of the patient as the expert in her health experience; avoid presenting oneself as an "expert" in the patient's experience of medical symptoms.

Share your formulation (or treatment model) of the problem with the patient and gather and integrate their feedback.

Use homework and pain logs to help patients understand the model. Check in about homework every time it is assigned.

Include family members and significant others in the assessment (and later, treatment) process. This is particularly true when the patient's environment is inadvertently reinforcing to their medical symptoms.

Maintain an awareness of your own cultural biases in terms of treatment (particularly regarding the use of opioid medications and/or disability status).

Request further medical evaluation if indicated; but be cautious in discussing further medical testing with the patient (as this can be reinforcing to an externalized model of symptoms in some cases).

DON'T:

Imply that you or your treatment can "cure" pain or other physical problems.
Ignore signs of resistance. These are important pieces of clinical information.
Suggest or imply that the patient's health problem is the sole result of psychological factors, such as the inability to "manage stress well."
Waste the interview by chasing medical or differential diagnoses; instead, focus on psychosocial factors that impact symptoms regardless of diagnosis.
Assume that the patient will understand or support the biopsychosocial model.
Reinforce the sick role by focusing solely on external features (such as the lack of a clear medical diagnosis) or on medical symptoms.

15.6 Summary

Perspectives on the relationships among factors that cause and contribute to disease have changed dramatically in the past century, and today it is generally accepted that physical illness can be influenced by a range of psychological and social elements. Psychophysiological disorders, or disorders characterized by dysfunction in bodily systems that are linked to psychosocial factors, are best understood through an integrative biopsychosocial approach that emphasizes reciprocal relationships among these factors.

This chapter summarizes interview and self-report methodologies for assessing four classic psychophysiological disorders (chronic pain, hypertension, headache, and insomnia) and provides some general caveat's and suggestions for working with patients who present with complex medical problems. As is true for most psychological disorders, the basic diagnostic interview for psychophysiological conditions is designed to aid in the construction of a tailored treatment program.

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Chapter 16
Posttraumatic Stress Disorder

Erin Smith and Sheila A.M. Rauch

16.1 Description of the Disorder

Lifetime estimates of posttraumatic stress disorder (PTSD) prevalence in the United States range between 7 and 12% (Breslau, Davis, Andreski, & Peterson, 1991; Kessler, Berglund, Demler, Jin, & Walters, 2005; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). The percentages vary according to the methodology of the study, definition of traumatic events, and assessment measures used (see below for discussion). Unlike other psychiatric disorders, PTSD requires a particular precipitating event as well as a specific symptom presentation. The *Diagnostic and Statistical Manual for Mental Disorders* (DSM-IV-TR; American Psychiatric Association, 2000) for PTSD criteria are presented in Table 16.1. In describing the disorder, we first focus on the defining trauma and then move to the symptom presentation of PTSD.

16.1.1 What is Trauma?

According to DSM-IV-TR (American Psychiatric Association, 2000), trauma is an event that involves the real or perceived threat of death or serious injury to an individual or another person. In addition, in order for the event to meet the criteria required for a trauma, the individual must respond to the event with intense feelings of fear, horror, or helplessness. Previous versions of the DSM defined trauma as an event that occurs outside normal human experience. However, research supports that even higher prevalence events, including the sudden death of a loved one or a life threatening illness, may result in the same symptom presentation (e.g., Breslau et al., 1998). As such, the definition of trauma was revised to include such events and

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Table 16.1 Diagnostic criteria for PTSD

Reexperiencing
Recurrent intrusive images, thoughts or memories of the event
Recurrent upsetting dreams of the event
Acting or feeling as if the event were occurring again
Becoming emotionally upset when exposed to reminders of the event
Becoming physiologically distressed when exposed to reminders of the event
Avoidance and emotional numbing
Avoidance of thoughts, feelings or discussion that reminds the individual of trauma
Avoidance of people, places, or situations that reminds the individual of trauma
Inability to remember important aspects of the traumatic event
Less interest in once pleasurable activities
Feeling unable to connect with others or feelings of detachment
Inability to experience emotion, restricted affect
Sense that the future will be cut short
Hyperarousal
Sleep disruption
Intense feelings of irritability or anger
Impaired concentration
Being alert and watchful
Being easily startled

Note. Adapted from the DSM-IV-TR (American Psychiatric Association, 2000)

modified to include the response of the individual as a second required element. This criterion that was added as research has found that the reactions of trauma survivors may distinguish those who recover from trauma from those who develop PTSD (Breslau & Kessler, 2001; March, 1993). These researchers found that 77% of individuals who reported a traumatic event also reported a subjective experience that met criteria for A2 (fear, helplessness or horror). Similarly, in a prospective study of crime survivors, Brewin, Andrews, and Rose (2000) found that trauma survivors who reported experiencing intense emotion at the time of trauma were more likely to have PTSD 6 months later than survivors who did not endorse intense emotions.

16.1.2 What is PTSD?

PTSD includes three clusters of symptoms: reexperiencing (criterion B), avoidance and emotional numbing (criterion C), and hyperarousal (criterion D). The specific symptoms are detailed in Table 16.1. The individual must endorse one or more of the reexperiencing symptoms. Reexperiencing symptoms can include upsetting thoughts and physiological reactions to reminders of a trauma, nightmares, or even severe flashbacks where the individual believes that he or she is back at the time of the trauma. Reexperiencing symptoms are a hallmark for PTSD as they are specific to PTSD whereas many of the other symptoms may also be present in other psychiatry disorders. Avoidance and numbing symptoms make up the second cluster.

A trauma survivor must endorse three or more of the seven potential avoidance and emotional numbing symptoms to meet the requirements for diagnosis. Avoidance can include avoiding any reminder of the traumatic experience, including emotions felt at the time of trauma, people, places, things, etc. Numbing can also be considered a type of avoidance of emotions but is typically described as a loss of enjoyment and a sense of disconnection from other people. The final symptom cluster is hyperarousal. Trauma survivors must endorse two or more hyperarousal symptoms. Hyperarousal includes problems with sleep and concentration, a sense of feeling constantly on edge, and anger/irritability. All symptoms endorsed must represent a change of function from before the traumatic event.

The final two criteria for a diagnosis of PTSD are the duration of symptoms (E) and social and occupational impairment (F). Symptoms must be present for 1 month or more to meet criteria for PTSD. In addition the presence of clinically significant distress and impairment in social, occupation, or other areas of functioning must also be apparent. The specifier of acute or chronic PTSD is dependent on the length of the presence of symptoms. If the symptoms are present for between 1 and 3 months, the specifier of acute is given. If the symptoms are present for more than 3 months, the specifier of chronic is given. If the symptoms appear more than 6 months after the traumatic event the delayed onset specifier may be used.

16.1.3 Prevalence

While once considered relatively rare, epidemiological studies have demonstrated that lifetime exposure to traumatic events, such as sexual assault, physical violence, natural disasters, vehicular accidents, combat, or life-threatening accidents, is surprisingly common. In the National Comorbidity Study (NCS), Kessler and colleagues (1995) found that 61% of men and 51% of women in this sample of adults in the US reported exposure to at least one traumatic event. This study also found that individual who had experienced traumatic exposure were more likely to not to have experience exposure to multiple traumatic events. In a study of approximately 2,181 individuals in the Detroit area, Breslau and colleagues (1998) found a lifetime prevalence rate of exposure of 90%, utilizing a different methodology that included the inclusion of a broader definition of trauma. The study found that the most common traumatic event endorsed by 60% of the sample was the sudden, unexpected death of a loved one. In a sample of 4,008 adult women in the United States, Resnick and colleagues (1993) found that 69% of the sample had lifetime exposure to any type of traumatic events and 36% had exposure to crimes that included sexual or aggravated assault or homicide of a close relative or friend.

One population that has a high rate of trauma exposure is military service personnel. In the 2001 National Survey of Veterans (NSV; US Department of Veterans Affairs, 2003), 20,000 veterans from multiple eras were surveyed with 39% reporting combat exposure and 36% reporting exposure to dead, dying, or wounded people. In a RAND Corporation study of 300,000 military service members who were deployed to Iraq or Afghanistan rates of traumatic exposure were varied. Half of the service members reported having a friend seriously wounded or killed, 45% reported seeing dead or seriously injured noncombatants, and over 10% reported that they were injured and required hospitalization (RAND Corp., 2008).

In addition to being more prevalent than originally thought, various studies have demonstrated that exposure to multiple traumatic events is common. Breslau, Davis, Andreski, and Peterson (1991) found that nearly 40% of their over 1,000 participants endorsed experiencing more than one traumatic event when surveyed. In the NCS sample, Kessler and colleagues (1995) study found that individuals with trauma exposure were more likely than not to have multiple traumatic exposures. In the Detroit Area Survey, Breslau and colleagues (1998) found that individuals who endorsed any qualifying traumatic event averaged five traumatic events over their lifetime.

Despite the high prevalence of trauma, estimates of lifetime prevalence of PTSD range from 7 to 12% for the general US population (Breslau et al., 1991; Resnick et al., 1993; Kessler et al., 1995; Kessler et al., 1995). In a large descriptive study of Army soldiers and Marines returning from deployment to Iraq and Afghanistan during a 1-year period in 2003–2004, Hoge, Achterlonie, and Milliken (2006) found the prevalence rates for scoring positive for two or more items on a four item PTSD scale were 9.8% for Iraq service members and 4.7% for Afghanistan service members. The relative risk of developing PTSD following trauma varied by the type of trauma experienced with interpersonal traumas (such as rape, combat, and physical assault) resulting in higher rates of PTSD than noninterpersonal traumas (such as natural disasters) (Kessler et al., 1995). However, even with interpersonal traumas, although many people endorse the symptoms of PTSD in the acute aftermath (without the duration criterion), most recovered naturally with a majority not meeting PTSD diagnosis at 3 months (Brewin, Andrews, Rose, Kirk, 1999; Riggs, Rothbaum, & Foa, 1995; Rothbaum, Foa, Riggs, Murdoch, Walsh, 1992).

16.2 Procedures for Gathering Information

Gathering information is critical to assessment. Information collected should aim to: provide a complete biopsychosocial picture of the patient, identify a primary diagnosis, identify comorbid disorders, and direct the process of treatment planning. Information gathered should also allow clinicians to monitor patients throughout treatment by providing a baseline of symptom presence and severity that allows monitoring of symptoms throughout treatment (Rauch & Foa, 2003).

To gather relevant information it is essential that clinicians are familiar with the core features of the disorder and ask for specific information about which symptoms the patient is experiencing. An understanding of the symptoms of PTSD and how they may be evident in a patient from a particular population is essential to discerning a diagnosis of PTSD. To do this, a clinician must identify and understand the stimuli that trigger anxiety, distress, and/or fear. Once the trigger is identified, the clinician must also understand the meaning connected to the trigger to accurately understand the symptom and be able to differentiate anxiety disorders (Ledley & Rauch, 2005). For example, a patient may state that they are uncomfortable in crowded restaurants and avoid these situations. If the reason for discomfort is not further investigated, the clinician would not be able to differentiate between PTSD, panic disorder, or even social anxiety disorder. Specifically, a patient may report that they avoid restaurants because this is where they were attacked. In such a case, PTSD is the most likely diagnosis. However, a patient may avoid restaurants because they are afraid of having a panic attack and not being to get out. In such a case, panic disorder is the most likely diagnosis. Finally, a patient may avoid restaurants because having others watching them eat is distressing. In such a case, social anxiety disorder is the most likely diagnosis. Thus, only by gathering additional information about the meaning of the trigger can the clinician make the most useful diagnosis.

For the assessment and diagnosis of PTSD it is vital to gather a comprehensive understanding of the patient's trauma history. While obtaining this history, clinicians must be aware of and sensitive to the patient's level of distress while recalling and sharing information about a traumatic event. This is critical in order for the assessor to obtain accurate information and also to know if the patient may need additional assistance during or after the assessment. Clinicians must thoughtfully navigate gathering trauma history information from patients during assessment to obtain the critical information that is needed to direct treatment without requiring a patient to disclose additional details that may not be needed at the time of assessment and may be better left to discuss in an ongoing therapeutic relationship. While several effective treatments for PTSD (prolonged exposure, cognitive processing therapy) include detailed trauma accounts, such detail is not needed for the purpose of diagnosis and directing treatment (Foa, Hembree, & Rothbaum, 2007; Resick & Schnicke, 1992). In general, for the purpose of assessment, the necessary information can be obtained without expressly requiring detailed disclosure of traumatic memories in order to minimize unnecessary distress for the patient.

To accomplish this balance between disclosure and nondisclosure, clinicians will benefit from establishing rapport with the patient that includes a nonjudgmental and sympathetic environment. Clinicians should work to establish an environment that fosters comfort and safety for the patient. For patients with PTSD, establishing rapport can be complicated by issues of trust, guilt, and shame that are often prominent and may interfere. The clinician may need to allow more time for patients to feel comfortable discussing their traumatic event or events. Providing the patient with information about the sequence of the assessment process, including the purpose of their disclosure about their trauma, may aid in establishing more rapport. For instance, you may explain that first you will get some general information about their life, such as information about their childhood, work history, and education or possibly what symptoms they are experiencing that are disruptive to their lives. When the patient has provided some more neutral information about his history, then you may ask the patient if he feels comfortable briefly providing you with a description of the traumatic event. Another important tool to assist in establishing rapport is ensuring that the clinician is monitoring the patient's description of their symptoms and the language that they use, and reflecting that language back as often possible to the patient. This demonstrates empathic listening and also helps the patient to clarify responses and engage in the assessment process.

Gathering information during assessment also allows for the clinician to provide psychoeducation about reactions to trauma and PTSD. This can include presenting information that normalizes the response to traumatic events as well as education about the development and treatment of PTSD. It can be very helpful for patients to understand that their symptoms are part of a reaction to their traumatic event. Discussing with the patients the commonality between the reactions of individuals to traumatic events can help to explain their experience and the problems that they are having and provide a new perspective on the difficulties they are experiencing. In addition, clinicians can also bring up common issues that are part of PTSD or closely related to it as a bridge for establishing rapport and trust, as well as providing an opportunity for the patient to discuss their difficulties. For instance in working with combat veterans a clinician may ask about how the veteran secures his or her home's perimeter. When the clinician displays an understanding of these types of behaviors, patients may feel more trusting and willing to share as well as gaining an understanding of trauma reactions.

The clinician needs to be aware of his or her own emotional reactions to patients when they share their trauma history. Clinicians must monitor their own facial expressions and nonverbal behavior to ensure an accepting response to disclosure. This contributes to the establishment of rapport and is necessary when clinicians may be hearing disturbing traumatic stories. The clinician should empathically listen to the patient and attempt to incorporate the patient's language into the interview. For example some patients may have difficulty describing their avoidance of crowds as anxiety but rather as being irritated by rude people. Some people have difficulty using the word "anxiety" at all and prefer to use discomfort or some other word instead. In addition, the clinician needs to be willing to modify the procedures of the assessment in response to the presentation of the patient. For instance patients with PTSD may often present as angry or mistrustful. If the patient is presenting with intense anger it may take some time and patience on the part of the clinician to acknowledge the patient's anger and allow him or her to feel heard and yet redirect the focus back onto the purpose of the interview. It may also take more time to establish trust and rapport involving the lengthening of the interview or dividing the interview into two sessions. The following case studies provide more detailed examples.

16.3 Case Illustrations

16.3.1 Sexual Assault Survivor

Mary, a 35-year old Caucasian woman, presented based on a referral from her primary care doctor after reporting extreme anxiety and inability to sleep. She reported that she has not been able to sleep for the past 2 months. She was noticeably anxious and reported that she has skipped work for the past week. She reported that 2 months ago, she had been out with some friends at a bar and had met a man whom she had spoken with for several hours. She had a couple of drinks but believed she was drugged as she passed out and does not remember anything until several hours later when she awoke in a strange apartment as she was being raped. She was horrified and terrified at the time and remembers that the man told her he would kill her if she told anyone.

Since that time, she is bombarded with images of the rape whenever she closes her eyes and finds herself constantly crying as she thinks about what happened. She has withdrawn from her friends and all activities and has spent most of her time at home. While initially she continued to go to work, her productivity has suffered and she is constantly distracted and unable to concentrate. Her boss continues to complain about her work. As a result, she has called in sick more and more recently and believes she will be fired. She feels terrified at every noise around her apartment thinking that the rapist is there. She has not told anyone about what happened and feels that she is to blame for trusting someone at a bar. She also reports feeling angry that her friends did not watch over her at the time. She feels unable to trust anyone. She sleeps only during the day and typically for only 2–3 h at a time. She came in for assistance because she realized things are not getting better and she cannot handle this on her own any longer.

16.3.2 Combat Veteran

Joe is a 22-year old member of the National Guard who is married and has a 17-month old son, who was born when Joe was deployed. He returned 8 months ago from a 12-month deployment to Iraq, his first combat tour. During his tour Joe engaged in a number of firefights with insurgents and saw dead and wounded individuals. Joe experienced a number of improvised explosive devices (IEDs) while on patrol in a convoy. These IEDs exploded while vehicles in his convoy were passing and Joe saw vehicles destroyed and members of his unit killed in these explosions. On one patrol while driving the humvee, Joe ran over an IED that failed to explode. While in Iraq Joe's sleep schedule was often varied and consisted of a few hours of sleep before patrols.

Joe reports that he was glad to return alive from Iraq and that he initially did not notice any problems after reuniting with his family. Joe reports that after a few weeks of being home he was having difficulty sleeping for longer than a 2-h period and preferred to sleep during the day. Joe feels that he has to tire himself out in order to fall asleep but does not feel that he is able to stay asleep and that he wakes up if there is any noise that he cannot easily identify. Joe reports that he has been having nightmares two to three times per week that consist of him firing his weapon at an unknown enemy that he cannot see. Joe also reports that he has nightmares about driving down a road and having the car in front of him explode. Joe states that he wakes up from these nightmares in a sweat and screaming and cannot return to sleep.

Joe's wife has told him that he yells and screams in his sleep and has hit her during the night while thrashing around. Joe states that he feels that he often finds himself thinking of fellow soldiers who died in Iraq and how their families are doing without them.

Joe reports that he has been less interested in hanging out with his friends and going to bars or parties. He feels that he would rather stay at home and is reluctant to leave the house except to go to work. Joe used to do all the grocery shopping for his family but has found that he is anxious when he is in the store and cannot have people standing behind him in line. Joe says that he has begun shopping late at night when the stores are less crowded. Joe also reports that he feels anxious when he cannot see the exit of a room and has taken to sitting facing the door in restaurants. He also reports that he has rearranged his living room so that he can see the door and out the window when he is sitting in his favorite chair. Joe says that he does not feel excited when his son does things like learning to walk or saying his first word. He states that he knows that he loves his wife and son but feels emotionally dead inside. He says that he often feels irritated and angry and has almost gotten into physical altercations with other drivers. Joe reports that he has been driving very fast and swerving around potholes and manhole covers since he returned. He reports that he takes a different route to and from work and he is wary of trash or dead animals on the side of the road because IEDS in Iraq were often concealed this way.

16.4 Recommendations for Formal Assessment

The diagnosis of PTSD and its comorbid disorders is a challenge for many clinicians. Ideally, formal assessment should include interview, self report, and collaborating evidence from other sources including spouse or other family, police, or military records, etc. However, often times, financial constraints and resources limit how much information can be gathered for an intake. The process of gathering information during an assessment from multiple sources functions to create a more complete diagnostic picture. In addition, clinicians can draw together information about the patient's behavior and symptoms from family members, friends, or supervisors with the patient's permission. Ethically this can only be done with the patient's consent and can provide information about behavioral changes before and after the traumatic event. Bed partners are often a valuable resource about patient's sleeping habits and the frequency of nightmares. Also the clinician can review medical records for information on past diagnoses, behavior, and treatment. It is clear that the use of more comprehensive assessments that include structured diagnostic interviews for PTSD and other comorbid disorders, self-report measures, and information from multiple sources allows for a more thorough assessment of PTSD and creates a clearer diagnosis.

Behavioral observations are a critical part of the assessment process. Avoidance, hypervigilance, and startle reactions can be observable in the behavior of patients during the interview. The clinician should monitor the patients' behavior throughout interview with these symptoms in mind. For example, hypervigilent behaviors may consist of needing to sit facing the door or possibly even being uncomfortable if the door is closed. The patient may also appear to be very aware of noises or voices outside of the room and may attend to these sounds instead of the content of the interview. Avoidance behaviors may be observed in the excessive use of humor or discussion of other topics to reduce the discussion of the trauma. In addition, patients may avoid eye contact and appear to become agitated when discussing the triggers that remind them of the trauma or the trauma itself. Such behavioral observations are an important part of an evaluation process and are often part of the information that is used to rate responses when conducting semistructured interviews (see below).

16.4.1 Interviews

In many cases, clinician interviews are the only source of information that is used to make a diagnosis. Regardless of whether an interview is the sole source of information or one of many sources, it is important to consider what type of interview is most appropriate. Clinicians may use unstructured, semistructured, or structured interviews. Further, these interviews may be specific to PTSD or provide a comprehensive assessment of DSM diagnoses. Unstructured interviews allow clinicians to gather information about a patient's biopsychosocial history and symptoms based on the discussion at the time of assessment but without a generally preplanned focus. In an unstructured interview, the clinician would likely want to at least have an idea of the presenting problem in order to prepare prior to the assessment. Unstructured interviews allow for flexibility but also suggest a higher likelihood that specific and sometimes critical information may be missed. Further, research has demonstrated that diagnostic accuracy is reduced when unstructured interviews are used in comparison with structured interviews (Kashner et al., 2003; Ramirez Basco et al., 2000).

Clinicians can increase diagnostic accuracy with the utilization of a structured interview (Miller, Dasher, Collins, Griffiths, & Brown, 2001). Semistructured and structured interviews have been developed for the purpose of guiding a clinician through a diagnostic assessment in a focused and specific way. Structured interviews have a rigid set of questions that are supposed to be asked as written, often with follow-up questions that are also scripted. Semistructured interviews involve scripted questions but also include more flexibility in follow-up questions and require the user to apply clinical judgment and knowledge of differential diagnosis in some cases. While truly structured interviews tend to be used primarily in epidemiological studies, semistructured interviews are often considered the gold-standard for clinical assessment. Some clinicians may be wary of the perceived restrictiveness of semistructured interviews. However, as mentioned above, diagnostic accuracy is improved using these interviews when compared to unstructured assessment.

Whereas semistructured interviews provide an incremental gain in diagnostic accuracy, they often require additional training in order to be proficient in their use. Extra training, budgetary constraints, patient load, misperception of semistructured interviews, and time constraints are often cited as deterrents to the use of semistructured interviews in some clinics and psychiatric care centers. However, given the impact that accurate diagnosis can have on treatment planning, the importance of accurate diagnosis should warrant consideration in the allotment of resources. The use of a semistructured interview conducted by a trained clinical professional can provide a more accurate diagnosis and directly impact patient care (Kashner et al., 2003).

In the following sections the interviews and measures most widely used in clinical settings will be considered and reviewed. Fully structured interviews are generally not used in clinical settings as discussed previously and will therefore not be mentioned in the following sections.

16.4.2 Semistructured Interviews

16.4.2.1 General Interviews

Structured Clinician Interview for DSM-IV Axis I Disorders (SCID-I) is a semistructured interview that requires clinicians to employ their clinical judgment of the DSM diagnostic system (First, Spitzer, Gibbon, Williams, 2000). The SCID contains modules with specific prompts and questions which assess a broad range of psychiatric diagnoses. While the SCID is a manualized interview, with carefully worded questions that should be read as they were constructed, clinician should not feel that the interview must be constrained or impersonal. The clinician should utilize their judgment about when to deviate and ask appropriate questions to follow-up or investigate to establish a firm diagnosis. The SCID assesses for the presence or absence of each symptom and current severity on a three-point scale of mild, moderate, and severe. The time for administration of the complete SCID is 1–2 h. However, the modular structure of the SCID allows for the utilization of individual modules or the selection of modules for frequently occurring comorbid disorders, rather than requiring the administration of the entire measure. Training is required for the use of the SCID and the intention is that only a clinician or highly trained interviewer will utilize this measure.

In the PTSD module of the SCID, respondents are asked to reply to the questions concerning the symptoms in light of their "worst trauma experience." The PTSD module has been shown to be psychometrically sound and to have good diagnostic utility (Friedman, Keane, & Resick, 2007). An earlier version of the SCID was found to have an inter-rater reliability of 78% with a kappa of 0.66 between different clinicians readministering the measure within a week (Keane, Caddell, & Taylor, 1998). Limitations of the SCID include that it only provides information about the presence or absence of symptoms and lacks assessment of the frequency or severity of symptoms.

Anxiety Disorders Interview Schedule – Revised (ADIS-R) was first developed by DiNardo, O'Brien, Barlow, Waddell, & Blanchard (1983) according to the DSM-III diagnoses as the ADIS. It was revised by DiNardo, Brown and Barlow (1994) to incorporate the DSM-IV criteria. This semistructured interview focuses primarily on the anxiety and affective disorders, including a PTSD module. The interview provides assessment of lifetime and current disorders, onset, duration, and severity of symptoms. It uses a Likert-like scaling procedure and is recommended for use by trained clinicians. The administration time for the measure is about 2 h. Training is required for the use of the ADIS-R and it is recommended that it only be utilized by trained professionals.

Psychometric studies of the ADIS-R have provided mixed results. A study by Blanchard, Gerardi, Kolb, & Barlow (1986) on Vietnam combat veterans found strong sensitivity (1.0) and specificity (0.91) with 93% inter-rater agreement with interview determined diagnoses on the ADIS-PTSD module. Another study by DiNardo and colleagues (1993) found the reliability of ADIS-R to be only fair when PTSD was the principal or secondary diagnosis (kappa = 0.55). Similarly, Brown, DiNardo, Lehman, & Campbell (2001) found moderate inter-rater reliability for current diagnosis (kappa = 0.59) and lifetime diagnosis (kappa = 0.61) (Brown et al.).

16.4.2.2 PTSD Specific Interviews

Clinician Administered PTSD Scale (CAPS) is a semistructured interview for PTSD that was developed by the National Center for PTSD (Blake et al., 1990). It is currently the most widely utilized semistructured interview for PTSD (Weathers, Keane, & Davidson, 2001). The CAPS is a measure that assesses the 17 core symptoms of PTSD and includes the severity and frequency of PTSD symptoms as well as associated features such as guilt and dissociation. The measure also includes assessment of functional impairment in employment and social performance.

The CAPS assesses all of the DSM-IV-criteria (A through F) and is structured to give a frequency and intensity score for each symptom. These can then be summed to produce a severity score for each symptom, which allows for flexibility in the scoring and use of the collected data. The CAPS prompt questions are constructed in a way to maximize clinician uniformity in administration. The CAPS permits flexibility in scoring and allows for different cut-off scores for severity of symptoms as well as the presence of symptoms to meet criteria for PTSD. The CAPS also provides specific anchor ratings with explicit behavioral examples that allow for clinician standardization. Clinicians require training to properly administer the CAPS and are expected to use their clinical judgment for follow-up questions to establish the best ratings. Information on the CAPS, rules and scoring, and a training CD are available on the National Center for PTSD, http://www.ncptsd.va.gov/ncmain/assessment/caps_training.html. The CAPS takes approximately 40–60 min to administer.

The CAPS has been shown to have high internal consistency (alphas = 0.87–0.95; Hyer, Summers, Boyd, Litaker, & Boudewyns, 1996). It also has been found to have high correlations with other PTSD measures, the Mississippi Scale for Combat-Related PTSD ($r = 0.91$), MMPI PK scale ($r = 0.77$), and PTSD checklist ($r = 0.94$) indicating good convergent validity (Weathers, Litz, Herman, Huska, & Keane, 1993). The CAPS has been used in numerous research studies and with various trauma exposed populations. These have included but are not limited to combat veterans, sexual assault victims, interpersonal violence, Holocaust survivors, torture survivors, motor vehicle accident survivors, and individuals with life-threatening diseases. It has been translated into 12 languages (Weathers, Keane, & Davidson 2001). Weathers, Ruscio, & Keane (1999) also found that the one of the scoring rules for the CAPS had a sensitivity of 0.91, specificity of 0.88 and a kappa of 0.75 for predicting a PTSD diagnosis on the SCID.

PTSD Symptoms Scale Interview (PSS-I) is a semistructured interview assessing a composite severity and frequency measure of the 17 symptoms of PTSD anchored to a target trauma (Foa, Riggs, Dancu, & Rothbaum, 1993). Each item is rated on a scale of 0 (not at all) to 3 (very much) for both severity and frequency of each PTSD symptom over the past 2 weeks. The developers of the scale state that the measure can be administered by lay interviewers who have been trained to recognize the presentation of the symptoms of PTSD in individuals who have experienced trauma. The PSS-I takes approximately 20–30 min to administer.

The PSS-I has been shown to have high internal consistency (Cronbach's alpha = 0.85), high test–retest reliability over 1 month ($r = 0.80$), and excellent inter-rater reliability for PTSD diagnosis (kappa = 0.91) (Foa et al., 1993). The PSS-I has been shown to correlate highly with other measures of PTSD, including the impact of events scale-revised ($r = 0.69$) (Horowitz, Wilner, &Alvarez, 1979). The PSS-I was also found to have good diagnostic effectiveness with a sensitivity of 0.88 and a specificity of 0.96 when compared to a diagnosis of PTSD on the SCID.

Structured Interview for PTSD (SIP) was developed by Davidson, Malik and Travers (1997) and consists of 17 items consistent with the DSM-IV symptoms of PTSD in addition to two items assessing survivor and behavioral guilt. Items are scored by the interviewer on a 5-point Likert scale. The scale for each item ranges from 0 (not at all) to 4 (extremely severe, daily, or produces so much distress the individual work and social functioning is impaired). The interview produces a dichotomous measure of presence or absence of PTSD diagnosis and symptom severity score, which is the summed score. It can be administered by either a clinician or a professionally trained interviewer. The interview takes approximately 10–30 min to administer.

Davidson and his colleges have done a number of studies on the psychometric properties of the SIP. Inter-rater reliability was high for the symptom score (0.97–0.99) and agreement (Cronbach's alpha = 0.94) on presence or absence of PTSD diagnosis (Davidson, Smith, & Kudler, 1989). Test–retest reliability was 0.71 over a 2-week period. The convergent validity of the SIP with other measures of PTSD and anxiety were found to be high (Davidson et al., 1997). The SIP scores of current and remitted PTSD cases when compared with the SCID were found to have good sensitivity (0.96) and specificity (0.80).

16.4.3 Self-Report Measures

Another useful source of information during assessments can be self-report measures. Self-report measures can include nonstandardized self-monitoring of symptoms or standardized constructed measures. Nonstandardized self-monitoring measures can be used in the assessment and treatment of PTSD. For instance a patient could keep a record of the occurrence of certain symptoms or behaviors, such as nightmares, the situation in which the symptom occurred, the thoughts present, and the patient's emotional reaction. Additionally the patient could monitor his or her level of distress during the occurrence of a symptom or behavior on a self-anchored scale. The subjective units of distress scale (SUDs) is a 0–100 point scale where 0 is no distress and 100 is extreme distress. The use of recording certain behaviors or the level of distress when certain symptoms or behaviors occur can be useful in treatment, as well to increase the patient's awareness of his or her symptoms.

Standardized measures include constructed self-report instruments developed to assess the severity of PTSD symptoms. Some can even be used to determine a suspected diagnosis of PTSD. These measures can be more time and cost efficient than structured assessments and can be used to screen for PTSD and/or monitor progress in treatment. These measures can also provide useful information when utilized in conjunction with structured interviews to examine the consistency of report and perception of symptoms by the patient.

Posttraumatic Diagnostic Scale (PDS) is a 49-item scale that was developed by Foa, Cashman, Jaycox, and Perry (1997) and is designed to measure PTSD symptom severity as well as diagnostic criteria according to the DSM-IV. The respondent first completes a 12-item checklist that assesses potential traumatic exposure. They are then asked to identify which event has bothered them most in the past month and their reaction at the time of the event in order to establish A1 and A2 criteria. The respondent then rates on a 4-point Likert scale the frequency/severity of the 17 symptoms in the past 30 days. The last section asks for the respondent to rate his or her impairment in nine areas of life functioning. The measure takes 10–15 min to administer. The PDS has been found to have excellent internal consistency (coefficient alpha = 0.92) and test–retest reliability for PTSD diagnosis over 2–3 weeks (kappa = 0.74). PTSD diagnosis had 82% agreement with SCID diagnosis with a kappa coefficient of 0.65. The sensitivity of the measure was found to be 0.89 and specificity 0.75.

Impact of Event Scale (IES and IES-R) is a 15-item scale developed by Horowitz and colleagues (1979) and revised by Weiss and Marmar (1997) (IES-R). The original measure included 15 items assessing intrusive and avoidance symptoms with the revised measure including seven additional items to assess hyperarousal. The original IES measure is one of the most widely used self-report measures to assess for psychological reactions to traumatic events (Friedman et al., 2007). Respondents rate how distressed or bothered they were by each symptom in the past week. The measure takes approximately 10 min to complete. In a review of the psychometric literature on the original IES, Sudin and Horowitz (2002) reported a range of correlations with clinician administered interviews with the SCID of 0.32–0.49 (McFall, Smith, Roszel et al., 1990) and the CAPS of 0.75–0.79 (Neal et al., 1994). Neal and colleagues also reported good sensitivity (0.89) and specificity (0.88) when compared to the diagnosis on the CAPS. There is less data on the IES-R and no convergent or discriminant validity has yet been made available.

Mississippi Scale for Combat-Related PTSD was developed by Keane, Caddell, and Taylor (1988) and is a 35-item scale that is used for combat related PTSD symptoms. Respondents are asked to rate the severity of symptoms since the event on a Likert scale. The scale was carefully constructed from 200 items to match the DSM-III criteria for PTSD. The scale takes approximately 10–15 min to complete. The developers of the scale reported high internal consistency (alpha = 0.94) and over a 1-week interval test–retest reliability of (0.97). Additionally the developers found high sensitivity (0.93) and specificity (0.89). Further studies have replicated the strong psychometric findings of the Mississippi scale (McFall, Smith, Mackay, & Tarver (1990). This is a widely used measure in clinical and research settings with veterans.

PTSD checklist (PCL) has two versions: one for military personnel and one for civilians (Weathers et al., 1993). The scale is 17 items to reflect the diagnostic criteria of the DSM-IV. Respondents are asked to rate how much a problem has bothered them in the past month on a 5-point Likert scale from 0 (not at all) to 5 (extremely). For the civilian scale, the intrusive and avoidant symptoms can be related to any life stressor. However, in the military scale these symptoms must be combat related. The psychometric properties of both the military and civilian scales are excellent. Examination of internal consistency found an alpha of 0.96. The scale has strong correlations with other measures of PTSD including the Mississippi scale (0.93), MMPI-PK scale (.77) and the IES (0.90). Blanchard, Jones-Alexander, Buckley, and Forneris (1996) found that the PCL strongly correlated with the CAPS (0.93) in a population of motor vehicle accident victims.

Keane PTSD scale of the MMPI-2 (PK scale) is currently 46 items empirically selected from the MMPI-2 (Lyons & Keane, 1992). The scale consists of true/false questions that can be administered as part of a full MMPI-2 or as a free-standing scale. The scale produces a total score that indicates the presence or absence of PTSD. The psychometric data on the PK scale is excellent. Strong internal consistency of the embedded and free-standing scale (alphas ranging from 0.95 to 0.96) and test–retest reliability coefficients over 2–3 days (0.95) were found by Herman, Weathers, Litz, & Keane (1996). Both the embedded and free-standing scales also correlated well with other measures of PTSD including the CAPS (0.77–0.80), the Mississippi scale (0.81–0.85), and the IES (0.65–0.71).

16.5 Impact of Race, Culture, Diversity and Age

16.5.1 Race and Culture

Research examining the influence of ethnicity and culture on PTSD has raised many questions in need of empirical examination. Breslau and colleagues (1998) found that non-European-Americans were twice as likely as European-Americans to develop PTSD after traumatic exposure. However, Kessler and colleagues (1995) did not find a significant difference between the lifetime prevalence rates of PTSD between Hispanics and non-Hispanics. In a review of literature on PTSD and ethnoracial minorities, Pole, Gone, & Kulkarni (2008) concluded that for African-Americans the findings for elevated PTSD rates are mixed. Following review of a number of both clinical and epidemiological studies, Pole and colleagues (2008) conclude that similar rates of PTSD have been found in African-Americans and European-Americans. However the NVVRS sample of 1,173 Vietnam veterans found higher rates of current PTSD among African-Americans combat veterans (20.6%) compared to European-Americans (13.7%) (Kulka et al., 1990). In a study of patients highly exposed to the September 11 terrorist attack African-Americans (AOR = 1.38, 95% CI 1.08–1.76) and Hispanics (AOR = 1.72, 95% CI 1.43–2.08) had a higher risk of PTSD than Caucasian-Americans, but not Asian-Americans (AOR = 0.74, 95% CI 0.61–0.91) (DiGrande et al., 2008).

Like the findings for African-Americans, the NVVRS found higher rates of PTSD for Latino American combat veterans (27.9%) compared to European-Americans (13.7%) (Kulka et al., 1990). In a study conducted in Mexico, Norris et al., 2003 and colleagues (2003) found that lifetime prevalence rates of PTSD were 7% for men and 15% for women, significantly greater than Kessler and colleagues (1995) findings of 5% for men and 10% for women. The author's argued that the higher rates found among studies of the Mexican population may be due to the impoverished economic conditions. The RAND Corporation report (2008) of the survey of 1,965 service members who had deployed to Iraq or Afghanistan found that Hispanic service members were more likely to report symptoms of PTSD. Pole and colleagues (2008) conclude in their review of the literature that the majority of the evidence has found elevated PTSD rates among Latinos.

There is limited research on PTSD and Asian-Americans and Pacific Islander Americans. The Hawaii Vietnam Veterans Project compared 100 Native Hawaiians and 102 Japanese-Americans to their counterparts in the NVVRS. Japanese-American veterans were found to have significantly lower rates of current PTSD (1.9% vs. 11.8%) and lifetime rates (8.8% vs. 22.4%) compared to European-Americans. Native Hawaiians were found to have equivalent rates of current PTSD compared to European-Americans (11.8% vs. 11.8%). However, Native Hawaiians did report significantly more severe symptoms (Friedman, Schnurr, Sengupta, Holmes, & Ashcraft, 2004).

In summary, while research suggests possible ethnic differences in PTSD prevalence, for the purpose of assessment of trauma and PTSD, no ethnicity is immune to these problems. As such, while clinicians should be aware of the influence of these factors and their potential influence on prevalence, skilled rapport building and thorough assessment remain critical.

16.5.2 Gender

The impact of gender on the development and diagnosis of PTSD is complex. Several epidemiological studies have demonstrated that woman have higher rates of PTSD than men. Specifically, Breslau, Davis, Andreski, and Peterson (1991) found that among Detroit area young adults, lifetime PTSD prevalence is 11.3% for women and 5.6% for men. Similarly, in the NCS, Kessler and colleagues (1995) found the prevalence of PTSD in woman was twice that of men (10.4% vs. 5%). Other studies have found similar gender differences. Whereas these findings demonstrate that women are at a higher risk of PTSD they do not provide an explanation for why this is so.

Some research has found that women may endorse more feelings of intense fear, helplessness, or horror when exposed to traumatic events. Breslau and Kessler (2001) also found that women were more likely to meet criteria of A2, feelings of intense fear, helplessness, or horror, (82%) compared to men (73%). Norris and colleagues (2003) replicated this finding of gender endorsement in a sample of Mexican men and women with a report of A2 by 80% of the women and 73% of the men. Other research (Brewin et al., 2000) has found that the report of intense feelings of fear helplessness or horror strongly predicted a PTSD diagnosis in victims of violent crime compared to those without a PTSD diagnosis ($\chi^2(1, N=138)=18.67$, $p<0.001$). This study also found that women were more likely to report fear ($r=0.23$) and horror ($r=0.24$). While this is an interesting finding it does not fully explain the gender difference between prevalence rates of PTSD.

One potential reason for the gender difference is that women may be more likely to be exposed to interpersonal trauma or more severe trauma that is more likely to result in PTSD. In a sample of women in the United States, Resnick and colleagues (1993) found that 69% of women reported being victimized by interpersonal trauma at least once in their lives. Further, women exposed to interpersonal violence, including sexual assault, aggravated assault, or the homicide of a relative or close friend had significantly higher rates of PTSD (25.8%) compared to noncrime victims (9.4%). Other studies have also supported that interpersonal violence, and sexual assault in particular, results in the highest risk for PTSD (Kessler et al., 1995; Norris et al., 2003).

While several studies have demonstrated that men have generally higher rates of exposure to assaultive violence than women (Breslau et al., 1998; Kessler et al., 1995; Norris, 1992), rates of sexual assault are higher in women. Breslau and colleagues found that women were more likely than men to report experiencing rape (9.4% vs. 1.1%) and other sexual assault (9.4% vs. 2.8%). These findings have been replicated in multiple studies in the United States (Breslau et al.; Kessler et al.; Norris et al., 2002), Mexico (Norris et al., 2002) and Canada (Stien, Walker, Hazen, & Forde, 1997). Thus, the higher rates of sexual assault in women compared to men may contribute to higher prevalence of PTSD.

In an effort to examine the influence of trauma exposure on the gender difference in PTSD prevalence in their sample, Breslau and colleagues (1998) statistically controlled for the type of trauma and reexamined the prevalence of PTSD. Women remained at higher risk of developing PTSD than men (females AOR = 2.01, 95% CI 1.23–3.29, males AOR = 1.00). However, this statistical control does not account for the complex subjective differences in trauma experience between genders due to differences in previous life experiences, general average differences in weight and height, etc. For example, pulling out the variance related to whether one was physically assaulted does not account for the fact that on average a woman is more likely smaller and the same physical assault may be perceived as more life threatening when the person assaulted is smaller.

In addition to having a higher likelihood of developing PTSD at some point during their lifetime, women also appear to have a more chronic course of PTSD than men. Breslau and colleagues (1998) found that the median amount of time for remission of symptoms from time of onset was 4 years in women compared to 1 year in men. Stein and colleagues (1997) in a sample of Canadians found that women were more prevalent in patients identified as having current PTSD. This finding should be considered in light of the idea that if women are more likely to develop PTSD at some point in their lifetime when asked at any given point in time a woman will therefore be more likely to have current PTSD. However it should be noted that these studies were of the general population and did not include the findings from studies of mainly male combat veterans. The NVVRS found that 15.2% of the male veterans who served in Vietnam and 8.5% of the female veterans had a diagnosis of PTSD 15 or more years after their military service (Kulka et al., 1990).

In a review of the recent research findings on the epidemiology of sex differences in trauma and PTSD, Norris, Foster, & Weisshaar (2002) concluded that research has found that women appear to experience similar traumatic events as more threatening when compared to men. In addition, the gender difference in prevalence of PTSD is most prominent from adolescence to middle age and then is less apparent in later life. Finally, they concluded that women are approximately twice as likely to develop PTSD in their lifetime and that PTSD tends to be more chronic in women than men.

Additional research on the impact and mechanisms of gender's influence on PTSD is critical. Saxe and Wolfe propose several directions for future research. Thoughtful exploration of whether there are reliable sex differences in stress response and what is the biological basis for these differences is warranted (Shalev, Orr, & Pitman, 1993). Additional examination of the role of interpersonal violence in the lives of men and women may also shed light on factors involved in the gender difference. Finally, gender identity and the social learning that is a part of this process may provide an additional window into understanding the complex relationship between gender and PTSD.

In summary, while the cause or causes of gender difference in prevalence of trauma and PTSD are not fully known, clinicians should be aware of gender differences in exposure to certain types of trauma (i.e., assaultive violence and sexual assault) and PTSD.

16.5.3 Socioeconomic Status and Education

Lower socioeconomic status (SES) and education play a role in increasing the risk for exposure to trauma and PTSD. Several studies have demonstrated that lower SES is related to higher risk for exposure to traumatic events (Brewin et al., 2000b; King, Vogt, & King, 2004). Among urban teens and young adults, Breslau, Wilcox, Storr, Lucia, and Anthony (2004) found that subsidized school lunch status and African heritage of male student respondents was predictive of exposure to interpersonal violence.

Many of these same studies also support that among those exposed to trauma, lower SES serves as a risk factor for PTSD (Brewin et al., 2000b; King, Vogt, & King, 2004). In a study of Mexican adults, Norris and colleagues (2003) found that the highest risk for PTSD was among those people with the lowest SES located in the poorest city that was part of the study. Indeed, rates of PTSD and chronic PTSD were approximately twice as high for individuals from the poorest city.

Norris and colleagues (2003) also found that rates of PTSD were three times as high among individuals with less than 6 years of education when compared to patients with a college degree. The Detroit Area Survey found that the individuals with low SES and less than high school education had a higher lifetime prevalence of assaultive violence (Breslau et al., 1998). DiGrande and colleagues (2008) found that residents living near the World Trade Center on 9/11 who did not complete High School (AOR = 1.96, 95% CI 1.50–2.55) were twice as likely to develop PTSD as individuals with a postgraduate education.

In summary, clinicians assessing PTSD must consider the influence of SES and education. However, even with the findings probable of SES differences in PTSD prevalence, no SES group is immune to these issues. Thus, as with ethnicity, while clinicians should be aware of the influence of these factors and their potential influence on prevalence, skilled rapport building and thorough assessment remain critical.

16.5.4 Age

Age has been found to be related to both trauma exposure and risk for PTSD following trauma exposure. In the Detroit Area Survey, Breslau and colleagues (1998) found that risk for trauma exposure peaked between the ages of 16 and 20. However the risk to experience traumatic events varied across four categories: assaultive violence, other injury or shock, trauma to others, and unexpected death. The largest decline in age related risk was for exposure to violence after the age of 20. However, individuals aged 41–45 years had the highest risk for the sudden death of loved one. Therefore it appears that while some risks for traumatic exposure decrease with age other risks increase.

The research appears to support that while the risk for some type of traumatic events increase with age the conditional risk for PTSD may decline slightly as age increases (Kessler et al., 1995; Norris, 1992). A review of research has found that the differences between men and women prevalence rates of PTSD is most prominent from adolescences to middle age and then are less apparent in later life (Norris et al., 2002). However, Foa, Keane, and Friedman (2000) point out that many in the older adult population face age-related situations that may exacerbate existing PTSD symptoms or PTSD symptoms that have been in remission. These include loss of functioning due to illness, social isolation, and the process of appraisal of one's life and can increase the vulnerability to PTSD. In addition the death of a loved one can trigger the reexperiencing of previous losses that may have been traumatic.

In considering age and traumatic exposure, childhood traumatic exposure must be considered. Breslau and colleagues estimated the cumulative incidence of childhood and adulthood trauma from a sample of over 1,000 adults aged 21–30. The study found that for events that occurred in childhood before the age of 15, the conditional lifetime prevalence rate of PTSD for women were approximately 35% and for men 10%. The researchers also found that the conditional prevalence for adulthood events, events that occurred after the individual had turned 15, were approximately 25% for women and 15% for men. The difference in the conditional lifetime prevalence indicate that women who experienced traumatic events in childhood before the age of 15 have an increased risk for the development of PTSD over their lifetime when compared to those that experienced such events after the age of 15. In a sample of 4,000 adolescents, Kilpatrick et al. (2003) found a lifetime prevalence rate of 10% for PTSD in girls and 6% in boys. Individuals who had experienced multiple sexual assaults had the highest lifetime prevalence with 34% for girls and 41% for boys. Individuals with multiple physical assaults or abusive punishments also had high prevalence rates for both girls (40%) and boys (20%).

In summary, age appears to influence both the type of trauma exposure and PTSD prevalence. While there is some decline in risk for exposure to certain traumatic events as individuals age, other risks such as the death of a loved one may increase. Clinicians should be aware of those trauma types that are most likely within a given age cohort but should also be aware of the cumulative impact or trauma exposure over the lifetime.

16.6 Information Critical to Make a Diagnosis

With the focus on diagnostic accuracy, it is imperative to discuss the importance of assessing for comorbid disorders. When assessing for PTSD, research supports that comorbidity is the rule and not the exception. For instance, in a study examining prevalence of anxiety disorders and other Axis I conditions, Brown and colleagues (2001) found among those with current PTSD, 92% met criteria for another Axis I disorder (77% major depressive disorder, 38% generalized anxiety disorder, and 31% alcohol abuse or dependence). In the NVVRS, 50% of veterans with PTSD had an additional Axis I diagnosis (Kulka et al., 1990). Kessler and colleagues (1995) also found high rates of comorbidity with PTSD. The DSM-IV-TR reports that lifetime risk for major depressive disorder in community samples range from 10 to 25% in females and from 5 to 12% in males (p. 372). The 1-year prevalence rate for generalized anxiety disorder in a community sample was approximately 3% with a lifetime rate of 5%.

Clinicians should consider the incorporation of assessments for commonly occurring comorbid disorders when assessing for PTSD. Such assessments may take the form of unstructured questioning or may be as formal as conducting semi-structured interviews of the most common comorbidities (major depressive disorder, alcohol/substance misuse, and other anxiety disorders). The clinician must decide how to proceed based on a balance between the time required (for training and administration of the instrument) and the quality of the diagnostic evaluation. Not only will this allow the clinician to obtain additional information about the patient's symptoms but it also provides the opportunity to verify the primary diagnosis. The clinician needs to be aware that comorbid disorders may mask some symptoms of PTSD. For instance, when a patient has both PTSD and active substance abuse, she may manage anxiety with the substance. If the clinician does not examine substance use, it may appear that the PTSD is well managed. In addition, patients may suffer from other anxiety disorders that are obscured by the PTSD. For instance, a patient may have panic disorder, but the clinician who is assessing PTSD may not recognize that the patient has both cued and uncued panic attacks and is afraid of safety (due to PTSD) but also afraid that she will not be able to get help if injured (due to panic disorder). Such comorbid presentations suggest differential treatment strategies that may integrate PTSD treatments with elements of treatments for the comorbid disorder (i.e., interoceptive exposure).

In addition to comorbidity with Axis I disorders, comorbidity with Axis II personality disorders is also common in PTSD. Bollinger, Riggs, Blake, & Ruzek (2000) conducted a study with inpatient veterans and found that 79% of the 107 participants met criteria for a personality disorder. These personality disorders included 47% avoidant, 46% paranoid, 28% obsessive-compulsive, and 15% antisocial. A second study with outpatient veterans found that nearly half of the participants met criteria for one personality disorder and 17% met criteria for two or more (Dunn et al., 2004). As such, assessment of Axis II conditions may assist in providing clear diagnosis and aid in treatment planning.

16.7 Dos and Don'ts

- Do provide information at the beginning about the purpose and structure of the assessment to help inform the patient and help him or her address some concerns and possible anxiety.

- Do establish good rapport. Remember patients who have experienced traumatic events or have PTSD may need some sensitivity on the part of the clinician. Consider this and allow more time to establish relaxed, nonjudgmental, empathetic tone for the assessment and interview.
- Do be aware of the common reactions to traumatic events. It is important for the clinician to be knowledgeable about common reactions to trauma in order to both recognize symptoms but also to provide psychoeducation. Become aware of how PTSD symptom may present. Specifically, clinicians must be attentive to how PTSD is manifest in the population that you are working with at the time. For instance, hypervigilance in combat veterans may involve securing the perimeter of their homes while rape survivors express hypervigilance in always having a designated companion. Knowledge of common reactions in your population will help you establish rapport, assess accurately, and provide psychoeducation to aid in treatment.
- Do place the patient's symptoms in the context of an anxiety disorder. This provides them with more understanding of their diagnosis and a direction within their quest for treatment and recovery.
- Be flexible according to the needs of the patient in regards to breaks, willingness to discuss information early in the assessment session, and in the variability of how patients with PTSD can present (e.g. angry, anxious, or withdrawn).
- Do remember that only symptoms that represent a change from functioning prior to trauma are a key part of PTSD.
- Do ground the avoidance to the traumatic event. Make sure you are understanding not only what the patient avoids but why they are avoiding it. This allows for you to identify behaviors that are contributing to a patient's PTSD and will be helpful to target in specialized PTSD treatment.
- Do remember to assess for the subjective experience of fear, helplessness, and horror related to the specific event.
- Do not jump to conclusions that because a patient has traumatic exposure that PTSD is inevitable. Remember traumatic exposure is prevalent and natural recovery is the most common trajectory.
- Do not forget all of the clinical skills that you have developed and been trained to utilize. Standardized assessments require the clinician to be knowledgeable and use your best clinical skills. If your intuition is not consistent with the interview look closely for what is creating the discrepancy.
- Do not jump in to the assessment and make the patient describe the traumatic event in detail. The information that is needed in an assessment is criteria A1 and A2. Having a patient discuss in detail the traumatic event can be distressing and may not be therapeutically helpful for the patient. There are empirically validated treatments in which the emotional processing of the traumatic events can occur in a safe environment. This does not need to occur during an assessment.
- Do not present PTSD as an untreatable chronic mental illness. There are many treatments that have been empirically validated to treat, reduce symptoms, and promote the recovery of patients that have PTSD. Provide patients with honest information about the treatment options available to them. And if you do not know about these options DO educate yourself.

16.8 Summary

Unfortunately exposure to traumatic events is much more prevalent in the general population than once thought. Fortunately it appears that although exposure to traumatic events is high, the most common trajectory after exposure is recovery over time. For some patients this recovery does not occur and the symptoms of PTSD develop. Both the traumatic exposure and subjective experience are required for a diagnosis of PTSD. The symptoms are clustered into three groups: reexperiencing, avoidance and emotional numbing, and hyperarousal.

In conclusion, as reviewed in this chapter, the variety of PTSD assessment measures and methods provides flexibility for clinicians to find an effective tool to use for any circumstance. When formulating comprehensive assessments for PTSD, clinicians should include a semistructured diagnostic interview for PTSD as well as interviews for common comorbid disorders, self-report measures, and information from multiple sources to allow for the most thorough assessment of PTSD and comorbid conditions. The clinician should also be intentional on covering information about the patient's family history, traumatic exposure history, social support system, positive and negative coping factors, risk factors, and conception of themselves and the world around them. Clinicians should utilize the variety of assessment measures available but remember to make the most of the clinical skills and training that they possess.

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Chapter 17
Marital Dyads

William Fals-Stewart, Wendy K.K. Lam, and Michelle L. Kelley

17.1 Description of the Population

Marriage in the United States is very clearly in a state of dynamic evolution, reflecting dramatically shifting social values and norms. Since the publication of the last edition of this book, the institution of marriage has continued to experience seismic change; perhaps most notably the legalization is some states of gay marriage (and heated legislative battles in many others). Contemporary times have more liberal attitudes about sexual relationships and physical intimacy, as well as ever-growing economic and political power of women in our society, not to mention substantial reforms in divorce law (Gurman, 2008). Yet, despite these seeming challenges to traditional marriage unions, the fortitude of promarriage sentiment and actions in the United States and in many other countries of the world remains.

Let us first consider a few prevalent manifestations of the state of marriage. Taken as a whole, about 62% of all marriages represent first-time marriages (Bramlett & Mosher, 2001; Kreider, 2005); roughly 72% of men and women have ever been married (Kreider, 2005). Although the oft-repeated divorce rate of 50% has declined somewhat over the past several years, the dissolution rate for first-time marriages is still alarming high at 43–46% (e.g., Schoen & Canudas-Romo, 2006; Schoen & Standish, 2001), particularly when one considers vows of "until death do us part." Despite high divorce rates, divorced people try again. The rate of first remarriage is approximately 75%, yet the rate of divorce for second marriages hovers around 60%. Currently, it has been estimated that nuclear families containing the original mother, father, and children constitute only about 25% of American households and another 25% of the households contain step-families.

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The remaining households do not contain two parents. Rather, they are made up of single-parent families, singles in groups, and same-sex adults. However, recent increases in cohabitation obscure actual trends in nuclear family stability (Centers for Disease Control and Prevention [CDC], 2007; Raley & Bumpass, 2003).

Dissolved marriages result in an increased risk both that children and parents may experience mental health problems and other adjustment difficulties. For some children, these problems may persist into adulthood. Moreover, children with divorced parents are more likely to experience divorce themselves (Amato, 2006; Amato & DeBoer, 2001). Unfortunately, these potential consequences of marital conflict and divorce levy an enormous toll on children, families, and society more broadly.

In the context of these sometimes corrosive effects of marital distress, during the past decade there has been a pronounced movement to save, improve, and rehabilitate marriage. For example, the Seventh Annual Smart Marriages Conference was held in San Francisco, CA in July, 2008, bringing together over 2,500 marriage educators, therapists, sociological and clinical researchers, who are dedicated to enhancing the prevalence, the stability, and the quality of marital relationships. As a function of the work of many of these professionals, the case for marriage becomes more and more compelling. In general, women and especially men and children enjoy relatively better mental and physical health benefits being in versus out of the state of marriage (CDC, 2007; Myers, 1999). Men, and especially women and children, benefit socio-economically from being in versus out of marriage (CDC, 2007; Ross, Mirowsky, & Goldsteen, 1990). Research indicates that, with the exception of marriages that involve high conflict or high abuse, the divorce process itself generally has negative short-term and long-term health and economic consequences for both adults and children, compared with families that stay together (Amato, 2000, 2006).

Thus, it is increasingly clear that there are many positive benefits to staying married and attempting to improve the function and quality of the adult intimate relationships. These findings set the stage for identifying critical indicators of relationship distress, so that we may, in turn, develop primary, secondary, and tertiary interventions to promote marital wellness.

This chapter focuses on diagnostic interviewing procedures that are associated with a tertiary evaluation and intervention format for clinically distressed couples. Some clarifications and disclaimers are in order at the outset. First, the notion of *diagnostic interviewing* for marital dyads needs some clarification. Unlike the case for individual mental health disorders, the goal is not to reach some definitive research – or clinically based diagnosis, *a la* the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (*DSM-IV*, American Psychiatric Association [APA], 2000). Despite significant and ongoing efforts to develop and to define what has been termed “relational diagnoses” (Kaslow, 1996), to date, no widely agreed upon diagnostic interviewing approach for marital dyads yields a diagnosis, or at least one that has developed any sort of consensus. Moreover, from a purely intervention perspective, it is not clear that a diagnostic label is critical. Rather, the clinician’s goal is to obtain a clear definition of the internal relationship conflicts and external stressors faced by a couple, complemented by an analysis of the couple’s adaptive processes for coping with their problems and for improving critical areas of interaction and individual levels of function.

Second, although the title of the chapter suggests an emphasis on “marital” dyads, the diagnostic procedures are applicable generally to any adult dyad that is attempting to develop and maintain an intimate relationship. Thus, for the most part, the assessment and evaluation procedures described herein may be modified easily to include unmarried partners of the opposite or same sex. Indeed, without prejudice, use of the terms husband, wife, she, he, men, women, spouse, and partner may be used interchangeably.

Third, in any intimate dyad, it may be useful to distinguish so-called relational problems in terms of the breadth of their consequences, and in the manifestation of clinical symptoms vs. risk factors (Beach, Wamboldt, Kaslow, Heyman, & Reiss, 2006). Relational problems may have consequences that are (a) generalized, affecting maintenance, or progression of multiple disorders, or (b) specific, if their effects are limited to a single disorder. Relational problems may also reflect recognizable sets of clinical symptoms that constitute a *disorder* that warrants treatment (e.g., abuse, marital discord), or they may present as a potential risk factor for negative outcomes in treatment of other clinical disorders (e.g., expressed emotion), but do not rise to a level of disorder on their own; these are *nondisordered* relational problems. These dimensions suggest four categories of relational problems:

Disordered and general relationship processes. In these cases, relationship dysfunction, per se, causes one or both partners sufficient dissatisfaction that the level of distress reaches clinical proportions. These cases present primarily seeking couple therapy.

Disordered and specific relationship processes that are associated with an individual disorder. This category is also a primary focus of this chapter because of the comorbidity of individual and relationship disorders. The key, for diagnostic purposes, is whether relationship therapy may be a necessary and sufficient therapy to remediate the individual’s disorder (e.g., sexual arousal or desire disorders).

Nondisordered and general relationship processes. Processes such as high expressed emotion, or conflict avoidance, or reinforcement of a problematic behavior are the primary descriptors for this group. Although not formal *DSM-IV* diagnoses, these relationship processes are highly relevant for their influence on and treatment of other disorders.

Nondisordered and specific relational processes. Relationship factors, such as reassurance-seeking processes in anxiety and depression, strongly influence the evocation, course, and treatments of particular individual disorders. This category includes disorders where relationship therapy may be indicated, but it is not deemed sufficient alone for the remediation of the individual’s problem.

The primary concern and methods of diagnosis and intervention are focused on the individual. If the case were determined to be appropriate for relationship analysis, diagnostic interviewing for the couple would be secondary. The first and second category will be the focus of this chapter.

Finally, the theoretical orientation for this chapter primarily will be cognitive-behavioral. After more than 30 years of research and clinical practice, behavioral marital therapy (BMT), with the revised name of behavioral couple therapy (BCT), and its closely affiliated rendition called cognitive-behavioral couple therapy (CBCT), constitutes the most empirically validated and clinically developed form of couple therapy in existence (Fals-Stewart, O'Farrell, Birchler, Cordova, & Kelley, 2005; Powers, Vedel, & Emmelkamp, 2008). Therefore, although the chapter will be written with basic and general application in mind, the BCT theoretical emphasis will be apparent.

17.2 Procedures for Gathering Information

17.2.1 A Guiding Framework: The Seven Cs

To guide conceptualization of marital dysfunction in general, Birchler and colleagues have developed a widely used model called "The Seven Cs" (1999). For a couple seeking marital evaluation and treatment, most of the ingredients important to a long-term intimate relationship can be accounted for by an analysis of the seven Cs. During the course of diagnostic interviewing and treatment planning, clinicians may well seek to learn about a given couple's relative strengths and areas for improvement according to these areas (the "Cs" of relationship functioning): Character features, Cultural and ethnic factors, Contract, Commitment, Caring, Communication, and Conflict resolution (Cole, 1989; Levenson, Carstensen, & Gottman, 1993; Nichols, 1988; Wynne, 1984). For many couples these seven domains of function constitute strengths to build upon or goals for which to strive: (a) socially compatible personal values and a healthy personality (i.e., *character*), (b) strong family traditions and compatible or stimulating *cultural and ethnic backgrounds*, (c) a marital *contract* that offers ongoing adaptations and a viable match between partners' expectations and experiences, (d) loyalty to the marriage with a long-term perspective and the ability and desire to work out the inevitable problems (i.e., *commitment*), (e) love, affection, emotional support, and an optimal balance of individual and mutually rewarding activities (i.e., *caring*), (f) open and effective *communication,* and (g) problem solving and anger management *conflict resolution* skills. With this seven Cs framework for relationship distress, let us now describe our general format, the elements of assessment, and how they relate to the seven C's formulation.

17.2.2 Methods of Gathering Information

The cognitive-behavioral approach has a fairly distinct tradition of beginning the couple evaluation process by employing three methods of gathering information to understand the problems and strengths of a given relationship and to plan various interventions to accomplish therapeutic goals. *First*, there are a series of clinical interviews, typically 2–4 sessions, which often include separate interviews with each partner as well as meeting the couple in a conjoint format. In general, the objectives of these so-called *assessment* interviews are to: (a) screen clients for the appropriateness of couple therapy, (b) determine the nature and course of events related to partners' presenting complaints, (c) determine the expectations and goals of the partners for couple therapy, (d) establish an effective therapeutic relationship, and (e) orient the couple to the therapist's orientation and approach to treatment.

Each partner has one or more reasons for initiating couple therapy. Typically, in the first meeting, the therapist will help the partners to develop a problem list, which indicates each person's perception of the problems in the relationship. Problems can be categorized into matters of content and process. Problematic content areas often include specific stressors that adversely affect the marriage, such as, unemployment, disruptive external events, finances, sex, in-law, and child-rearing problems, and annoying personality traits and managing mental or physical illnesses. Process concerns have to do with couple adaptive processes, or *how* the couple interacts. Typical complaints include ineffective ways of communicating with one another and concerns regarding how they attempt to solve problems and manage relationship disputes.

It is also important during the evaluation stage to ascertain the partners' respective goals and expectations for couple therapy. For example, are they both committed to the relationship or is one partner planning separation or divorce? Are the problems identified negotiable for both partners? Are their goals and expectations realistic given each partner's levels of competence and motivation? Before making a treatment plan, all these interpersonal competence and motivational issues must be considered. Finally, the initial interviews allow the therapist to establish a therapeutic relationship with the couple. The therapist must possess sufficient credibility, gain trust, and offer hope that the partners' pain, suffering, dissatisfaction, and distress can be addressed effectively. If this step is not accomplished, the couple may not engage in the therapeutic process. One way to aid in the accomplishment of this preliminary bonding is to explain in advance the purpose and value of the various evaluation and intervention procedures. What is expected from the clients? What are the role and responsibilities of the therapist? How will information be gathered and what is the prognosis for resolving their problems? An open discussion about what will be done and why is another hallmark of the BCT approach.

A *second* fairly unique assessment procedure used in BCT to gather diagnostic information about the couple is the administration of various questionnaires and inventories to learn more about specific strengths and problem areas. Table 17.1 presents the seven Cs model and lists the methods and procedures that may be employed to gather relevant information for each area of interest. It includes several standardized measures designed to assess one or more of the following variables: global relationship satisfaction, communication skills and deficits, areas of change requested by the partners, types of conflict, intensity levels of conflict and styles of conflict resolution, partners' cognitions, expectations, and beliefs about the relationship that may be causing problems, sexual functioning and dissatisfaction, participation in pleasurable events and

Table 17.1 The seven C's assessment procedures

Domain	Assessment procedures[a]
Character	Interview: psychiatric history, collateral information. Paper-and-pencil instruments: BDI, MCMI-III, MMPI-2, PAI.
Culture	Interview: developmental history, family-of-origin history. Observation.
Contract	Interview: relationship history. Paper-and-pencil instruments: ACQ, IRA, RBI.
Commitment	Interview: relationship history. Paper-and-pencil instruments: DAS, MSI, IRA.
Caring	Observation. Paper-and-pencil instruments: CPQ, DSFI, IRA.
Communication	Observation. Communication sample. Paper-and-pencil instruments: CPQ, CRAC.
Conflict resolution	Observation. Communication sample. Behavioral analysis of conflict. Paper-and-pencil instruments: CRAC, CTS-2, RTC, ACQ.

[a] ACQ is the *Areas of Change Questionnaire* (Weiss & Birchler, 1975). CRAC is The *Clinician Rating of Adult Communication* (Basco et al., 1991). CTS-2 is the *Conflict Tactics Scale-2* (Straus et al., 1996). DAS is the *Dyadic Adjustment Scale* (Spanier, 1976). IRA is the *Inventory of Rewarding Activities* (Birchler, 1983). CPQ is the *Communication Patterns Questionnaire* (Christensen & Sullaway, 1984; Hahlweg et al., 2000). PAI is the *Personality Assessment Inventory* (Morey, 1991). MCMI-III is the *Millon Clinical Multiaxial Inventory* (Millon, 1994). MMPI-2 is the *Minnesota Multiphasic Personality Inventory* (Butcher et al., 1989). MSI is the *Marital Status Inventory* (Weiss & Cerreto, 1980). RBI is the *Relationship Beliefs Inventory* (Eidelson & Epstein, 1982). RTC is the *Responses to Conflict Scale* (Birchler & Fals-Stewart, 1994)

rewarding social activities, and steps toward divorce. BCT practitioners typically ask the couple to complete a selected set of these instruments either before or at the very beginning of the evaluation process. In most cases feedback and interpretation of the results are given to the couple regarding their responses.

The *third* assessment procedure that is routinely associated with the practice of BCT is observation and analysis of a sample of in vivo marital conflict resolution. That is, couples are helped to identify an existing issue about which they have disagreement; they are asked to spend 10–15 min in the session talking together in a demonstration of how they attempt to resolve the problem. The therapist may or may not leave the room to observe less obtrusively and/or to videotape the communication sample for later review and analysis. The conflict resolution communication sample provides unique and important information regarding the level of problem-solving skill the couple possesses to resolve relationship conflicts and the extent to which improvement in these adaptive processes will become treatment goals. In addition to the development of complex and sophisticated couple interaction coding systems (Backenstrass, Fiedler, Kronmüller, Reck, Hahlweg, & Mundt, 2007), several investigators have developed and apply a simple coding system for therapists to quantify a given couple's communication and problem-solving skills (Basco, Birchler, Kalal, Talbott, & Slater, 1991; Heyman, Weiss, & Eddy, 1995). Once the initial assessment procedures have been completed, a feedback and review meeting, or "Round Table," is held with the couple to review findings and to decide whether or not to proceed with treatment.

In summary, the multimethod assessment procedures employed by BCT practitioners provide a solid basis for describing a couple's presenting problems and relationship strengths (Birchler, Weiss, & Vincent, 1975; Fals-Stewart, Birchler, & Ellis, 1999). The procedures provide both converging and diverging types of information that are used in a systematic manner to conceptualize relationship (dys)function and to formulate a treatment plan.

17.3 Case Illustration

A brief case illustration will be provided to give some life to the diagnostic interviewing process with marital dyads. This is an example of a case in which individual psychopathology has resulted in a level of marital distress such that the relationship needs professional attention or else it might not survive. Brad and Shirley were referred for couple therapy by Shirley's individual psychotherapist. Shirley was being treated with antidepressant medications and with cognitive-behavioral therapy for major depression, with recurrent and severe episodes. During the initial session, Brad, a 43-year-old oncology surgeon, explained that his wife began talking about suicide a few weeks previously and in a serious discussion between them, she indicated that she was not sure she loved him any more and she would just as soon end her miserable life. After 17 years of marriage, this was the first time Shirley, aged 39, said that she may not love him any more. The statement shocked and concerned Brad sufficiently that he requested marital therapy. Shirley, while tearing up several times during the interview, admitted that she had reached a point where she believed she could not make her husband happy; indeed that, lifelong, she seemed to refuse to be happy herself, and that the persistent anxiety and depression that she has battled for years had simply worn her out.

When the couple was asked to outline some of the relationship-based problems, all references were connected to Shirley's battle with depression. She had not worked for several years. She found it almost impossible some days to get out of bed. If she did get up, she was both overwhelmed with the idea of tasks to be accomplished and felt tremendous guilt about not doing them or doing them well enough. Brad claimed that he has run out of strategies to support and motivate his wife to function. With great sorrow, he admitted that out of fear for her well-being, he was anxious to get home each night after work, yet at the same time he dreaded getting there. He never knew whether he would find a morbidly depressed wife, an angry and resentful one, or the occasional one who was more hopeful and in a fairly good mood. Moreover, over recent months, no matter which one he met, the dyadic interaction, somehow, soon turned conflictual: they would end up in arguments (if Shirley had the energy) or mutual withdrawal and resentment if she did not. Brad insisted that no matter whether he tried to reach out to support his wife, or he withdrew to give her space, his choice would seem to be the wrong one. Shirley responded that Brad often seemed to be demanding that she be more active or, alternatively, he would simply ignore her. Their social life had bifurcated: Brad, reluctantly, was going to most work- and family-related functions alone; Shirley often stayed home and felt guilty or resented being left alone. Their sex life had deteriorated to the point that they had not had sex for over 6 months. To make matters far worse, the couple recently had purchased a bigger house. It was a “fixer-upper” and the couple was living in the adjacent pool house because a huge remodeling project was underway. Shirley claimed that dealing with all the decisions about remodeling and coping with the inconvenience of living out of suitcases in cramped, rat-infested quarters was simply overwhelming. However, representing the “no win” status of this current relationship, they had decided to purchase the house because the previous home, though familiar, was too small and unsatisfactory. The couple had made a relatively irreversible financial commitment to the new house, but the project had become a daily “monster” for Shirley to face. Throughout the interview each partner’s experience and feelings were solicited and validated by the therapist. The initial interview ended with a commendation to the couple for seeking assistance given their challenging problems and encouragement to continue the evaluation with a goal of improving the marriage as an important way to manage Shirley’s depression. The couple evidenced some sense of relief and each partner made a strong commitment to participate in the evaluation process. They were given the marital assessment battery to complete before the next session.

At the second session, a week later, the couple brought back the completed marital inventories: The DAS, the ACQ, the MSI, the RTC, the IRA, and the BDI (see Table 17.1 for references). They reported little difficulty completing the questionnaires, although Brad had done them the night before the meeting and Shirley had to work on them over three sittings. They both seemed more hopeful than in the initial interview and reported that it seemed important and a relief to get into couple therapy where they could begin to address some long-standing relationship problems. This collaborative attitude set the tone for a productive session.

The topic selected for the communication sample was “going out.” Brad began the discussion with a monologue concerning how he walks on eggshells anticipating resistance to ideas about going out to socialize. As he talked, Shirley became tearful, but was silent. Eventually, she seemed to get frustrated with his monologue, so she interrupted him and angrily blamed him for pressuring her, or using guilt to get her to get out of the house. Brad, in turn, seemed irritated by her display of accusatory negative affect and he basically withdrew from the conversation. Shirley then started crying again, making self- and relationship-depreciating comments. This brief communication sample was a wonderful (if unfortunate) illustration of the maladaptive interaction process that this couple had adopted over time. They reported that the discussion was all too representative of what happens at home.

The remainder of the hour was devoted to learning about the couple’s developmental history. They had met at a religion-based college in the Midwest, having grown up in the same western state. Brad was in medical school while Shirley was taking undergraduate courses leading to nursing school. Their religious and social values matched well and they were attracted to one another physically. Brad was confident and outgoing; Shirley was reserved and quiet. She responded well to Brad’s leadership in the relationship. They dated steadily for about 2 years and decided to get married after Brad graduated from medical school and Shirley from undergraduate school. The wedding went very well, but was better attended and supported by Brad's side of the family. The couple moved to the east coast where Brad began a residency. Soon after the move, as Shirley was trying to get accepted into a nursing school, she had her first episode of major depression since early high school. Brad worked long hours during residency and Shirley, being unemployed, out of school, and away from friends and family, felt isolated and alone. She became so depressed that she saw a psychiatrist for medication management. They reported that the medication was only partially helpful; the symptoms of depression somewhat improved. After this first trying year of marriage, Brad had the opportunity to continue his training with a 6-month opportunity in London. The couple hoped the foreign travel would be exciting and enjoyable. However, the same pattern emerged: Brad worked long hours and Shirley was alone without friends, family, or familiar surroundings. She became depressed and was hospitalized for the first time for 2 days, with vague suicidal ideation. Her medication was changed and once again, she improved only somewhat. The couple returned to the United States, Brad completed his training in surgery, and Shirley completed 2 years of nursing school. This period was described as fairly good; they established some friends and the structure of school helped Shirley manage her mood. Then Brad was offered an academic position in a west coast city and the couple decided to move. Basically, over the past several years, Brad had been very successful in his work. Shirley had initially worked intermittently as a nurse, but had not worked for the past 3 years. Her inability to work was attributed to persistent and debilitating depression and anxiety.

It was noted that the couple's description of their relationship history was dominated by their constant preoccupation with anxiety and depression management. Similarly, certain follow-up questions about the quality and level of the seven Cs were reported in this context. For example, the couple professed strong commitment to the marriage, Shirley claiming: "Brad is my best friend and only real support"; Brad saying: "I love this woman and I would never leave her." When asked about caring behaviors, both partners softened as they reported that the expression of affection and sexual interaction was totally dependent on Shirley's mood and whether the couple was getting along. If both situations were positive, a variety of caring behaviors were exchanged and satisfying. Finally, cultural and ethnic factors were a match for the couple. From the outset, they decided not to have children. The only problem from a family perspective was that Brad enjoyed frequent contact with his extended family but Shirley had become estranged from her extended family. In addition, on many occasions Brad would participate in activities without her. Having people over to their house was also problematic.

Next the individual sessions were conducted. In Brad's case, he grew up as the oldest of four boys in an intact family in Utah, where his father was a grocery store owner and his mother a stay-at-home mom. He reported no mental illness or conduct disorders among his immediate relatives. His childhood was very positive and he was an outstanding student and an athlete in high school. He graduated with honors both from undergraduate and medical school. Before marriage to Shirley, he dated and had casual sexual encounters with two women, but he saw neither for more than a few months. Although he lived in the Midwest, the East, and in London for 6 months, he claimed that his life has been rigidly scripted by his passion for medicine. He was currently the codirector of a cancer center, which he said allowed him to maintain a fair balance of academic, personal, and family activities. His parents and all three brothers were married with no divorce or separation. When asked an open question about his relationship with his wife, he admitted that being with her over the 18 years has often been quite a struggle. More recently, he says that he has grown weary of trying to support her and he is quite concerned about her mortality. His supportive efforts have been less successful and their interactions more predictable and unsatisfactory over the past 6 months, especially since they purchased the new house. Nevertheless, he had no intention of leaving her, as she sometimes feared.

Compared with Brad, Shirley's childhood and premarital history were much more traumatic. Her father was an alcoholic in a community in Utah that did not tolerate alcoholism. There was domestic violence between his parents and she reports that her mother was either sick or fighting with her husband or children. Shirley now believes her mother's chronic sickness to be emotionally based, but it was considered physical illness at the time. Shirley was the middle of three girls and was anxious and shy all her life. She was either ignored or criticized by both her parents. By junior high school, she was spending most of her time at friends' houses, amazed at how different and how well their families functioned. By high school, though still shy and reserved, she found solace in getting very good grades…a "brain" as she was called by schoolmates. In retrospect, she believed that her deep-seated problems with anxiety and depression were caused by her childhood experiences. She could never do anything right and she was prevented from socializing outside her dysfunctional family until well into junior high school. With mixed feelings she decided to go away to college in the Midwest, where she met Brad. He was her first serious boyfriend and the first person with whom she had sex. She felt that she did not deserve him, and that she was making not only her own, but also his life miserable, and she saw no way out…except possibly suicide. Despite persistent suicidal ideation and increased references interpersonally, she denied any plan or significant intent. Given her personal experiences, her psychiatrist reported her symptoms of depression and anxiety to be refractory to any combination of antidepressant medications. According to Shirley, the next biological treatment that might be considered is electroconvulsive therapy (ECT), but there were no real plans for ECT at the time of the interview. She remains on medications; however, she is very depressed on almost a daily basis. She reports that she would like her relationship with her husband to endure, but admits that it is critical that her relationship with Brad improve. She believes that their love is gradually being lost to her battle with depression.

The marital assessment questionnaires were particularly valuable in this case because so much of the interview time was taken up in describing the relationship history and the couple's problems in coping with Shirley's depression. The inventories allowed for a broader review of potential problem areas, strengths, and targets for intervention (see Table 17.2).

Table 17.2 Pre-treatment results of couple relationship assessment battery for Brad and Shirley

Inventory[a]	Brad	Shirley	Target[b]
Dyadic Adjustment Scale (DAS)	95	85	>100
Areas of Change Questionnaire (ACQ)	5	16	<4
Marital Status Inventory (MSI)	2	2	<4
Responses to Conflict Scale (RTC)	2.4	3.6	<1.4
Beck Depression Inventory (BDI)	5	33	<18
Inventory of Rewarding Activities (IRA)			
% Activities alone	9	48	26
% Activities together	30	44	34
% Activities social	6	2	12
% Activities family	28	6	20
% Activities other adults	27	0	8

[a] Refer to Table 17.1 for full references

[b] Generally accepted cutoff scores differentiating happy from unhappy clients

The DAS scores suggested mild marital dissatisfaction for Brad and mild-moderate for Shirley. These scores confirmed the presence of marital distress, but strengths in the marriage are suggested as well. The ACQ results strongly suggest an "identified patient" phenomenon, a response pattern that prevails throughout these data. The couple indicated that the relationship would be improved if Shirley modified 16 domestic behaviors compared with 5 for Brad. A review of items implicated Shirley's household duties and social activities outside the home as major problem areas. The MSI suggested that the topic of divorce has come up only in moments of high conflict or desperation. No significant planning for relationship dissolution was endorsed by either partner. The RTC indicated that both partners engage in significant levels of maladaptive responses to marital conflict. However, an inspection of items suggested that Brad's style was more passive-withdrawal and Shirley expressed a mixed style of passive-withdrawal and active-aggressive behaviors. A BDI score of 5 confirmed that Brad did not report any significant depressive symptoms, whereas Shirley, as expected, scored 33, and endorsed very high levels of depression. Finally, the IRA displayed a pattern of engagement in rewarding activities that was out of balance for one partner compared with the other and compared with happy couples. Shirley engaged in a disproportionate amount of 4 out of 5 categories: excessive activities alone, too few adult couple social activities, too few family activities, and too few activities with other adults (without husband). In contrast, Brad had 3 of 5 categories with skewed data: proportionately too few activities alone, too few adult couple social activities, and too much activity with other adults (without his wife). In summary, the inventories strongly confirmed that Shirley, related to her experience with major depression and anxiety, was seen by both partners as the major dysfunctional partner. The fact that Brad had learned maladaptive coping behaviors within the relationship had escaped the couple's awareness. Additionally, the extent that the couple's adaptive processes had become compromised and relatively ineffective over time was not something they could well comprehend at the beginning of treatment.

The couple entered the Round Table session with some normal anticipatory anxiety, even though, to their credit, and unlike many couples, they brought and had maintained a strong collaborative set throughout the evaluation process. The data obtained from the relationship assessment inventories and from the communication sample were shared with the couple in a way to acknowledge that not only Shirley, but also the couple was struggling significantly with major depression. It was as if an unwelcome intruder had entered their home from the outset and presented them a near overwhelming challenge. However, once all acknowledged the depression issue up front, the main emphasis during the remainder of the feedback session was on the couple's use of maladaptive strategies to cope with relationship problems. To make this point, the therapist highlighted and interpreted data gathered from all three assessment methods (as discussed above). The seven Cs were explored to impress upon the couple that the quality of their adaptive behaviors is a function of both partners. This couple benefited from having the seven Cs defined and then independently rating the level of function for the couple as a unit. These scores were then compared with the therapist's ratings. The empathically oriented group discussion serves as an opportunity to reach consensus and to outline treatment goals. For the sake of brevity, the seven Cs consensus scores reached by the group for Brad and Shirley, on the 1–7 point scale were: Character features = 2 (coping with severe major depression; somewhat incompatible desires for social engagement), Cultural and ethnic factors = 6 (many similar values and cultural traditions), Contract = 4 (mixed, some major expectations for the marriage not matched by experience, for both partners), Commitment = 6 (basically no desire to leave the marriage by either partner, entering therapy to improve quality), Caring = 4 (mixed, despite deterioration in sex and affection, strong underlying respect, affirmation, and support for one another), Communication and Conflict resolution = 2 (significant malfunctioning in both of these adaptive processes).

Thus, based on the findings of the entire diagnostic interviewing process, the treatment goals negotiated and endorsed by the couple included enhanced coordination of care and management of Shirley's symptoms of anxiety and depression. The plan was for the psychiatrist, Shirley's individual CBT therapist, and the couple therapist to collaborate on a master plan to integrate the concurrent therapies. Unless the vegetative behaviors, comorbid anxieties, the hopelessness, pervasive negative thinking, and intermittent suicidal ideation could be addressed, there would be little improvement in either partner's lives or in their relationship. Shirley was still in the process of trial and error with atypical mood stabilizing medications. Unfortunately, so far no combination of medications had achieved an optimum result. The plan for CBT was to intensify an independent program of enhanced cognitive restructuring and behavioral activation. Although Brad previously had been self-nominated as the primary person responsible for Shirley's personal and social activities, the primary responsibility would be turned over to Shirley and her CBT therapist. In this context, the couple therapy would be designed to analyze and to rehabilitate the couple's communication and problem solving skills. Primarily, we wanted to help the couple replace walking on eggshells, multiple levels of guilt in both partners, unspoken reciprocal resentments, making erroneous assumptions, and conflict-avoidant tendencies with much more open, assertive, and direct communications. In the context of enhancing their existing commitment and fundamental respect and caring for one another, teaching them how to listen to and empathize with their partner, while being fully responsible for self-satisfaction in life, seemed appropriate. Additionally, some work in the areas of caring and contract would result in a successful therapy outcome. The caring improvements would include recovering previous expressions of affection and sexual activity. The contract work would include some combination of change and acceptance: each partner verbalizing and behaviorally being responsible for getting more of what they expect from self and partner, or alternatively, learning to accept certain aspects of their self and partner with less concern and responsibility for change.

This book does not concern itself with the formal intervention stages of treatments. However, the reader may refer to traditional BCT (O'Farrell & Fals-Stewart, 2006), CBCT (Baucom & Epstein, 1990; Epstein & Baucom, 2002), and the more recent versions of Integrative behavioral couple therapy (IBCT; Christensen et al., 2004; Christensen, Atkins, Yi, Baucom, & George, 2006; Jacobson & Christensen, 1998), all of which would serve well as approaches to be used to help this couple.

17.4 Recommendations for Formal Assessment

There can be little question that providers are now accountable to two powerful masters: *effectiveness* and *efficiency* (Fals-Stewart, Yates, & Klostermann, 2005). Given the economics of health care (including, of course, mental health care), there are increasingly strict limits on lengths and intensities of intervention, in large part as a cost containment matter. From this vantage, a fundamental goal of formal assessment is to gather information in the most efficient manner that allows the provider to formulate a treatment plan that will be effective in a circumscribed (usually short) period of time.

Thus, as a set of recommendations, the focus must be on efficiency of information gathering. Clinical interviewing forms the bedrock of assessment, but, in our view, on its own is typically very inefficient. Of the methods discussed, paper-and-pencil measures (DAS, ACQ) allow a provider to gather information quickly and with minimal expense and to ensure that specific areas that partners may be reluctant to discuss are, in fact, assessed. The information gathered from these measures can then be used as reference to guide clinical interviewing (e.g., "On this form you filled out, you say 'in-laws' are a problem between you. Can you explain that to me?"). They also help ensure important areas are not missed and can provide a certain level of privacy for sensitive topics (e.g., violence, sex) that clinical sessions cannot. Communication sampling is also very efficient (the process can take about 30 min from beginning to end) and provides invaluable information that can also inform the clinical interview. Moreover, it provides important information about how partners interact that may not otherwise be observed within their communications *with* a provider (where communication is often "filtered" through the provider – partners talk to the provider and the provider talks to the partner, versus partners talking to each other). Lastly, having a Round Table summary with the partners allows for an exchange of perceptions by the provider and the partners to ascertain the central problems, goals of therapy, issues that were missed, and so on. Although the Round Table discussion is ostensibly a review of the assessment findings, it is actually a brief assessment in its own right, allowing all partners to further formulate their respective views of the problems (which can be, and often is, at some variance with the information gathered in other parts of the evaluation) and to help plan a treatment course.

17.5 Standardized Interview Formats

In this section, we will outline a comprehensive interview format for formal dyadic assessment that has been developed and modified in many BCT settings over three decades (see Table 17.3). This basic format has been employed successfully by many clinical researchers (e.g., Birchler, 1983). The series of sessions represents a relatively unrestricted approach, managed care considerations notwithstanding. Information that is redundant with previous discussion will not be elaborated upon in this section. The elements of the interview format are highlighted in Table 17.3.

Table 17.3 Diagnostic interviewing for couples general sequence and content

Session one: Initial interview

1. Introductions and registration
2. Discussion of confidentiality issues
3. Defining objectives of the session
4. What brings you (each) to the clinic?
5. Partners' goals and expectations
6. Identification and analysis of presenting problems
7. Commitments to complete the evaluation process(couple relationship inventories handed out)

Session two: Second conjoint interview

1. Collect inventories, debrief partners' experience with intake and inventories
2. Obtain communication sample of problem solving abilities and style (with debrief and elaboration of home-based conflict patterns)
3. Relationship developmental history
4. Continue assessing status of relationship. exploration of positive and negative features of seven Cs: character features, cultural and ethnic factors, contract issues, commitment by partners to relationship and to therapy, caring behaviors and complaints, communication skills issues, and conflict resolution processes

Session three: Individual interviews with each partner

1. Assessment of individual partners (developmental and prior relationship histories, closer analysis of character features, motivational issues, and possible hidden agendas)
2. Opportunity to understand and validate the individual partners regarding their relationship experiences and perspectives (joining)

Session four: Third conjoint interview (Round Table)

1. Interactional summary of multimethod assessment findings (summarize interview data, inventories, and observed problem solving)
2. Develop treatment goals and contract, offer referrals, or terminate case

17.5.1 Initial Interview

The initial interview begins with greeting clients and giving them introductory information about the clinic, the therapist(s), discussing any fees or insurance-type issues, defining objectives for the session, and then describing policies about confidentiality. The issue of confidentiality should be covered before getting into the details of the couple's personal lives. In addition to the requirement to break confidentiality based on knowledge of certain threats and risks to self or others (specific laws vary by states), the default ownership of information gained in any manner by the therapist is the individual client. Many couple therapists, present authors included, usually modify this policy so that all members of the therapy group may share information gained by any means. That is, adhering to an open confidentiality agreement, there would be no secrets kept from partners by the therapists. In our clinic, partners are told the pros and cons of each policy and the couple has input into the decision. Naturally, in cases where confidentiality may affect personal safety (e.g., domestic violence), open confidentiality may not be appropriate and strict confidentiality might be adopted.

We believe that it is important for each partner to have the opportunity (and each should accept the responsibility) to participate in the interview process. Therefore, the couple is informed in advance that the therapist will facilitate the discussion so that each partner can share his or her concerns and offer individual perspectives. Thus, the therapist not only seeks to balance the amount of talk-time, but also may rephrase or reframe partners' complaints into "I" statements vs. "You" statements. Partners are encouraged to talk for themselves and not for their partners as discussions ensue about what brings the couple into the clinic, what are partners' perceptions of the major problems, and their expectations and goals for counseling.

We strongly encourage both partners to attend the initial session. We are hoping to treat *the relationship* and having them together at the outset reinforces the importance of this unit. However, there are rare exceptions. In some cases, one partner insists on being seen alone before their mate is included in the process. Although this procedure is discouraged, we do comply if it is the best or only way to get them started. In cases of the existence or threat of domestic violence, we may interview partners separately. The separate interviews may be conducted at the outset of contact or sometimes, upon learning of the threat during the conjoint interview, we may break into confidential individual interviews. A third scenario in which individual interviews may be indicated during the first session is in the cases where the partners are so angry, hostile, emotionally upset, or persistent in blaming one another, that the conjoint interview process becomes too destructive or ineffective for gathering the appropriate information. In such cases, Halford (2001) has suggested that the partners be interviewed separately so that the therapist can most efficiently and effectively join with them to learn about their concerns. The couple is brought together later, in the same or in a subsequent meeting, where the therapist can facilitate the development of shared information and common ground for going forward.

Finally, if the primary objectives of the initial interview have been met, the therapist explains exactly what would occur over the following few meetings and the couple is ready to make the decision whether or not to complete the evaluation process. If yes, they are given a package of assessment inventories to complete independently and bring back with them for the second interview. In rare instances, for example in cases where clients have impaired vision, a reading disability, or English as a second language, partners may need assistance to complete the battery.

17.5.2 Session Two

Most couples return for the second evaluation meeting having completed their inventories. These are checked for completion and any missing data are obtained before or after the meeting. On occasion, additional encouragement is needed to get the questionnaires completed before the final assessment session. We have found it useful to ask the couple about their impressions of the intake session and about completing the questionnaires. There are a wide range of potential responses that inform us about motivational, competence, and couple interaction factors. For example, at the low end of the therapy prognosis continuum is the couple that reports no mutual discussion of the first meeting during the entire week, no particularly good impressions of the therapist, and a lack of interest in or appreciation for the purpose of the assessment questionnaires. At the high end, the couple on their own may have initiated serious discussions about the prospects of beginning couple therapy, report good impressions of the competence or friendliness of the therapist, and hopeful expressions about improving the relationship. In any case, the therapist takes the opportunity to support partners' participation and frame positively the early efforts of the couple to engage in the therapeutic process.

After debriefing the couple about their experiences in therapy thus far, we give them instructions for demonstrating their ability to resolve relationship conflicts. We call this the *communication sample*. The most frequent complaint of couples entering treatment is about communication. Based on the presenting complaints enumerated in session one, or from the written questionnaires, the therapist helps the couple to define one or two problems to be discussed for about 10 min. We want an issue that is current, relevant, and worth discussing, without it being so difficult as to overly upset them. In our setting, the therapist leaves the room and observes behind a one-way mirror while the discussion is being videotaped. The tape may be used for analysis and/or videotape feedback to the couple. In settings where observational equipment does not exist, the therapist simply instructs the couple to ignore his or her presence and carry out the conversation.

With a little experience the therapist can learn much about the couple's optimal communication skills and factors related to the partners' relationship competence and cohesion. After the 10 min discussion, it is a good idea to spend a few minutes talking with the couple about how representative the sample was to communication patterns at home. Most samples turn out to be fairly representative and therefore valid for diagnostic purposes. Some clinic displays, however, are unique and unusual for the couples; they report, for example, that they would never talk for 10 min at home, or they would not be nearly as considerate to one another, and so forth. Common patterns of dysfunctional communication observed include couples that avoid conflict (i.e., both are intimidated, mutually withdrawn, or disengaged), those that escalate conflict (i.e., both partners are defensive and aggressive), or they may display a mixed pattern called "pursuit-distancer" or "demand-withdraw." Employed excessively, none of these styles is constructive and when observed, communication and problem solving skills may be targets for intervention. Finally, although infrequent, some couples do demonstrate good communication skills; in these cases, there may be some other reason for their treatment-seeking behavior.

The activities mentioned above account for about half the time allotted to the second session. The remainder of the session typically is devoted to two additional activities: Taking a developmental history of the couple and further exploration of certain aspects of the seven Cs. The couple is asked to describe how and when they met, what their early dating was like, and the decisions leading up to marriage (or engagement, moving in together, and so forth). It is believed that the information shared on this topic and the partners' accompanying positive or negative affect displayed as they relate the information is also prognostic for therapy outcome. That is, regarding the early stage of the relationship, some couples display positive emotion, humor, and ascribe positive attributes to their partner; others offer negative affect and have nothing positive to say about courtship and marriage. Partners who are able to remember and share warm emotional connections give the couple and therapist a foundation upon which to build future positive interactions.

Finally, with any time remaining, there are always some aspects of the seven Cs that benefit from further inquiry. Therapists have heard presenting complaints from the initial interview or they may be interested in following up on information obtained from the relationship assessment batteries. For example, they can continue to explore the development and current status of relationship commitment, the change over time in the frequency and types of caring behaviors, the relationship between the couple and their in-laws, or perhaps how relationship contract issues have changed over time. The point is to explore these issues in the presence of both partners so that each can offer their own perspective and get feedback from their partner and the therapist(s).

17.5.3 Session Three

If circumstances noted previously do not dictate an earlier individual history-taking session, we devote the third session to separate interviews for each partner. In our setting, where a cotherapist model prevails, each therapist meets with one of the partners. Otherwise, a solo therapist can split the 60-min, perhaps split a 90-min session, or conduct two separate meetings in the same or over successive weeks. In any case, the purpose of the individual meetings is basically twofold: First, obtain a thorough developmental history of the individual, including review of topics that might be too sensitive for the conjoint interviews (e.g., history and current status of mental illness, history of previous relationships, personal traumas, and other stressful life events). Second, based in part on previous information, the individual session allows the therapist to probe about critical relationship issues and make an effort to connect and join with the individual at hand. For example, if the issue of personal commitment to the relationship was previously mentioned by either partner, in the private meeting the therapist may explore in some detail the client's fears, goals, or intentions about committing to this relationship. Hidden agendas may be uncovered (or verified). Ambivalent feelings may be explored and validated. In some instances, the therapist may assist the client in planning how to bring up certain topics to their mate in a constructive manner. The alliance and one–one connection developed during this personal interview often serves the couple well when everyone gets back together. Most contemporary approaches to couple therapy include individual interviews.

17.5.4 Session Four

In the present model, the diagnostic interviewing is concluded with the fourth meeting (or the fifth meeting overall if two meetings were scheduled for the individual interviews). We call this meeting the Round Table because all parties get together to share information gathered throughout the assessment process and together the group makes a decision whether or not to engage in the intervention stage of treatment.

The Round Table features summaries of the three types of information according to the following sequence: (a) the therapist gives the couple a written summary of the relationship assessment questionnaires and the findings are reviewed, (b) the therapist describes the strengths and areas for improvement based on the observed communication sample, and (c) these data are combined with information obtained in the individual and conjoint interviews, based on the seven Cs, an overall relationship analysis is presented to the couple. In some cases, the therapist simply presents the couple a 7-point rating scale of each of the seven Cs (1 = vulnerability to 7 = strength) and explains the basis for the evaluative scores. Better yet, as an exercise in reaching consensus and defining goals for therapy, the partners are invited to make their own independent ratings after the seven Cs dimensions are defined. These scores are then discussed and compared with the therapist ratings. Any significant discrepancies are resolved through clarification and discussion.

The final step in the Round Table is for all parties to decide whether couple therapy is indicated, review what the goals, methods, and timeline for interventions would be, and make the first homework assignment. The most common variation to this typical plan is a recommendation for concurrent individual or group therapy for one or both partners to work on individual issues. Other outcomes include (a) one partner wants to enter therapy and the other does not (if so, a referral for individual therapy may be indicated for the interested partner), (b) the therapists recommend couple therapy, but the couple declines (usually issues related to work schedules, insurance coverage/financial problems, lack of desire to work with the particular clinic or therapist, or insufficient motivation to continue work in therapy, and (c) the couple wants couple therapy, but the therapists decline (the couple is perceived at the present time to be unworkable; serious individual problems need to be stabilized or resolved first, or the problems encountered are outside of the therapist's expertise or personal comfort zone).

17.6 Impact of Race, Culture, Diversity, and Age

Cultural and ethnic factors refer to the cultural, ethnic, racial, religious, family-of-origin, socio-economic, and other societal variables that collectively form the past and present context in which individuals and couples exist. Certainly, given these important and broad developmental and contextual parameters, many adjustments by the couple are required and the potential exists for many types of conflicts to occur, both between the partners and between the couple and extended family or the community. In this domain, considerations of cultural diversity, the impact of family of origin issues (i.e., family systems theory), and role preferences and role strain are relevant. For example, relationship issues facing gay and lesbian couples are gaining increasing recognition in research and practice. Overall, these couples may face issues within the dyad similar to heterosexual couples (e.g., communication issues, caring), and also encounter additional stressors due to stigma and other societal pressures (Otis, Rostosky, Riggle & Hamrin, 2006) that further impact relationship satisfaction.

Age. As with any clinical consideration, the client's age and developmental stage are a key element guiding assessment procedures and interpretation. For relationship processes, the impact of age adds another layer, highlighting the chronological age of the couple dyad (e.g., relationship "age" or duration), as well as the developmental age of the partners and couple (e.g., new parents, parenting adolescents, retirement). For example, the link between the transition to parenthood and declines in marital satisfaction has been well-documented (e.g., Shapiro, Gottman, & Carrére, 2000). Pregnancy, childbirth, and caring for an infant all place considerable stress on individuals and couples, which may be reflected in changes in marital functioning. Although a couple may report high levels of relationship satisfaction, the birth of a new child may prompt anxieties about role fulfillment, meeting expectations, and maintaining a high quality relationship for the sake of their child. Likewise, couples in middle-age, who also have adolescents in the home, find themselves at a low point in the family life cycle, with decreased marital satisfaction and increased risk for divorce (Gecas & Seff, 1990; Gottman & Levenson, 2000). Heightened challenges of adolescents' pubertal and sexual maturation, changing social identity and cognitions, occurring in concert with a parent's mid-life concerns with time and future, may lead to and exacerbate marital distress.

Integration of individual and cultural diversity into practice. The integration of multicultural conceptualization and treatment of emotional and behavioral problems has become a cornerstone of professional practice, including couple and family therapy. All clinical assessments must be understood with attention to factors such as age, gender, gender identity, race, ethnicity, culture, religion, spirituality, sexual orientation, disability, language, and socioeconomic status. Providers must also be self-aware and have knowledge of the impact of ageism, racism, sexism, and homophobia in all aspects of practice (Daniel, Roysircar, Abeles & Boyd, 2004). The integration of individual and cultural diversity into practice underscores the need for providers to become familiar with one's own culture and the cultures of the couples and families with whom they work (e.g., Lee & Everett, 2004).

17.7 Information Critical to Making the Diagnosis

Although Relational Disorders currently are not recognized in standardized, psychiatric diagnostic classifications, the *DSM-IV* (APA, 2000) includes in its V-codes, v61.10, Partner Relational Problem, "when the focus of clinical attention is a pattern of interaction between spouses or partners characterized by negative communication (e.g., criticisms), distorted communication (e.g., unrealistic expectations), or noncommunication (e.g., withdrawal) that is associated with clinically significant impairment in individual or family functioning or the development of symptoms in one or both partners" (p. 737). Typically, individuals displaying symptoms as indicated above have an adjustment disorder, which according to *DSM-IV* is the development of emotional or behavioral symptoms in response to an identifiable psychosocial stressor(s) occurring within 3 months of the onset of the stressor(s) (APA, 2000, p. 679). For couples, the unnamed stressor may be marital conflict. The *DSM-IV* further codifies adjustment disorders according to specific types of symptom expression (e.g., adjustment disorder with depressed mood, anxiety, disturbed emotions, or conduct). Additionally, certain couples may experience other *DSM-IV*-identified problems related to abuse, such as physical or sexual abuse of adults. Within marriage, the former is exemplified by spouse beating, the latter by sexual coercion or rape (APA, 2000, p. 738). Moreover, there is no doubt that marital distress can be either the cause of or the result of any number of major psychological disorders experienced by partners or other family members. These problems include, but are not limited to depression, anxiety, substance abuse, personality disorders, and chronic medical problems.

At present, a classification of Relational Disorders is being considered for inclusion in the DSM-V, which would create a standardized "diagnostic system" for dysfunction within marital and other relational dyads (Beach et al., 2006; Denton, 2007). As described earlier in this chapter, some have suggested basic relational process categories of *disordered* vs. *nondisordered*, and *general* vs. *specific*, that may further indicate the most appropriate method of treatment for a given couple (Beach et al., 2006). Others, however, do not view relational problems as a diagnosable "mental disorder" (First, 2006), despite their clear influence on mental health functioning. With publication of the DSM-V not anticipated until approximately 2012, such a standardized diagnostic system is far from reality.

In practice, what is assessed and how it is assessed tend to be heavily influenced by the interviewer's theoretical orientation and the couple's presenting problems. For example, marital therapists who are more traditional, psychodynamically oriented, or emotion-focused may rely exclusively on the interview method for history-taking assessment information. In comparison, behaviorists, as well as certain strategic family therapists, may de-emphasize history-taking and instead focus on here-and-now interactions. Moreover, so-called brief treatment family therapists may employ only a short problem-focused assessment interview and then proceed with strategic interventions within the first hour of contact. Although the field of marital therapy is increasingly embracing integrationist and couple-oriented perspectives, most therapists end up learning well one, or possibly two, basic approaches due to practical challenges of being clinically competent in all types of approaches.

17.8 Dos and Don'ts

This short list of Dos and Don'ts applies to the orientation and formats discussed above, using a cognitive-behavioral approach for diagnostic interviewing with distressed couples. Additionally, based on experience and opinion, not on science and facts, the following are offered for consideration.

Do treat the relationship as your client. Work to establish a collaborative set and take every opportunity to frame the couple's strengths and problems in interactional terms. Getting partners to perceive themselves as being on the same team, versus being adversaries, is half the battle toward success in couple therapy.

Do grab onto as many parts of the elephant (i.e., the distressed couple) as possible. Extra work is involved in obtaining information using more than one assessment method. Interviewing is a necessary but not a sufficient procedure for gathering diagnostic information. Standardized assessment inventories offer more extensive, specific, objective, quantitative, within- and across-couple comparative information than interviewing alone. Observed samples of problem solving communication can provide more objective, skill-related information than do interviews or inventories.

Do use a straightforward psycho-educational approach with couples. We advocate informing the couple honestly and completely about what you are planning, thinking, and assuming about them. We assume that people are doing the best that they can to lead a satisfactory life and make a satisfying relationship. We explain our assessment methods, their purposes, their findings, and offer the couple an honest appraisal of the health of their relationship. There are no unexplained, hidden, or strategic manipulations for the benefit of the couple or the therapist.

Do not keep secrets that would jeopardize your moral, ethical, legal, therapeutic, or relationship-advocate standing. Apart from laws relating to confidentiality and apart from safety issues involving domestic violence, we encourage clients to be open and honest with their partners. Insignificant personal and appropriately private issues notwithstanding, we do not keep secrets regarding affairs, substance abuse, hidden agendas, and so forth that contradict prorelationship goals (when the treatment contract is to maintain and improve the relationship). If the perpetrator does not elect to disclose such critical information, we usually will not break the secret ourselves, but we will terminate the couple therapy.

Do not establish alliances with individuals that will compromise the effectiveness of the conjoint therapy. Again, legal and personal safety imperatives aside, it is tempting to ally with partners whom we like, for whom we feel sorry, or with partners who have the power in the dyad. However, we suggest that therapists be aware of this tendency. It is better to assume a 50–50 contribution to the status of the relationship and make alliances only in the interest of helping the partner and the couple to reach appropriate goals.

Do not make assumptions about the book by reading its cover. That is, couples present for evaluation in many states of (dys)function. It is tempting to note partners' psychiatric diagnoses, their active and recovering status regarding substance abuse, their poor premorbid childhoods and adulthood relationship histories, and other factors that sometimes correlate with poor prognosis for change (e.g., certain ethnic and religious values, socio-economic status, employment status, and so forth) and conclude prematurely that a couple is unworkable or does not deserve the expenditure of therapeutic resources. This natural tendency is a mistake. It is not possible to determine, in advance of careful evaluation and a trial of appropriate interventions, who is and who is not a good candidate for treatment. Some of the most awful-sounding cases can indeed be the most rewarding. If people show up, they deserve to give therapy at least a trial. The real data about process and outcomes come in fast enough once interventions are underway.

17.9 Summary

Diagnostic interviewing with distressed marital dyads is composed of part art, part science. To date, the behavioral couple therapy (BCT) approach is one of only two empirically validated treatment approaches. Traditionally, practitioners employ three methods to gather diagnostic information: conjoint and individual interviews for learning about the partners' presenting complaints, individual and relationship developmental histories, and reports of their adaptive processes to maintain the relationship. Standardized relationship assessment questionnaires are employed to increase the breadth and efficiency of information gathered and to allow for within- and across-couple quantifiable comparisons. Finally, couples are asked to provide in vivo samples of problem solving communication so that the provider can observe directly the conflict resolution abilities of the couple. Taken together, these data provide a wealth of information that can be used to learn about individual and couple resources and vulnerabilities, life events and related stressors that may affect the couple and the quality of adaptive processes developed by the dyad to maintain relationship outcomes. Following a series of evaluation sessions, the couple and the therapist decide whether couple therapy is indicated and, if so, relationship treatment goals are defined. The seven C's heuristic model is described as a useful way to summarize domains of function that are critical for the maintenance of long-term relationship intimacy.

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Chapter 18
Children

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18.1 Description of the Population

The diagnostic interview is often the first step in the process of diagnosis and treatment of a client. The goal of a diagnostic interview is to gather relevant information pertaining to the client's problem. Additionally, the diagnostic interview sets the stage for building rapport with the client, and giving the client a way to conceptualize the diagnostic and treatment process. Approaching a diagnostic interview with sensitivity and careful planning is of paramount importance. This is especially so when working with children. Unlike adult populations, a variety of factors particular to children and their development must be considered when assessing them. This chapter serves to outline these considerations for children, including the importance of the development process, guidelines for interviewing, a look at several recommended diagnostic interviews, and a case study to illustrate.

18.1.1 Differences Between Adults and Children

It is easy to approach working with a child, especially an older child or adolescent, as though one is working with a "little adult." However, the developmental process is such that approaching a child in this way would be a mistake. Development can make children somewhat of a moving target. Certain behaviors that are acceptable at one age may be considered maladptive at another age (e.g., enuresis). Additionally, children do not develop following the exact same timeline. Wide swaths of time may be encompassed within the normal limit for development of a particular milestone.

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Development also affects symptom presentation. Although adult and childhood disorders are generally subject to the same diagnostic categories (e.g., depression or bipolar disorder), slight differences exist within categories for children and adults. It is essential to look carefully at the age cutoffs and requirements before making a diagnosis. It is also important to remember that even under the umbrella of "childhood" symptoms, the display of problem behaviors differ across age. The symptom presentation of anxiety or depression in a 6-year old may be quite different from the presentation of a 16-year old. For example, a 6-year old with depression may report more somatic symptoms, and appear more irritable than sad, but a 16-year old may seem to present more as an adult, for example with anhedonia. Having a solid understanding of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV-TR*; APA, 2000) recommendations for age and symptoms presentation will help avoid some of the confusion surrounding childhood diagnoses and reduce the likelihood of a missed diagnosis or a misdiagnosis.

It is also important to remember the special circumstances that surround a child coming in for a diagnostic interview. Unlike many adults, children rarely come to therapy voluntarily; most of the time they are brought in at the behest of a parent or a teacher. Because of this referral process, many children do not fully understand the reason they are seeing a clinician. A child may only have been told that he or she is going to the "doctor" to be "tested." Clinicians should always ascertain what knowledge the child has about the visit, and explain fully what the reasons behind the interview are. It is especially important to clarify to the child what will be occurring during your meeting and what *will not* be occurring (e.g., shots). In addition to obtaining informed consent from the appropriate parent or guardian (as per the American Psychological Association's ethics code, 2002), it is also important to obtain assent from the child to conduct the interview. This not only addresses the ethical consideration, but also sets in motion the rapport building process.

Because a child may not be able to concentrate long enough for one prolonged session, or because the child needs time to warm up to and build rapport with the clinician, it may be necessary to have multiple interviews with the child. This may be especially true of younger children, who may tire easily, or need multiple breaks to sustain attention.

18.2 Procedures for Gathering Information

18.2.1 Using the Referral Question

A diagnostic interview should always be approached in the context of the referral question. The referral question should be used as a guideline that will help the clinician decide who to interview, what assessments to use, and what questions to ask. It helps the clinician identify what may be the most pertinent information to seek during the diagnostic interview process. Without the referral question, the clinician is trying to piece together a puzzle without having any idea what the picture may look like.

The referral question gives the clinician the picture to the puzzle so that it can then be determined if the pieces inside the box (the actual symptoms of the child) match the picture on the outside of the box; that is, what if any diagnosis is appropriate.

An effective diagnostic interview will generally contain questions about symptoms presentation including frequency, duration, and severity, environmental factors that impact the symptoms, such as if the behaviors only occur in one setting or around specific individuals, previously tried interventions and their effectiveness, family history as well as developmental history of the child, what the child's strengths are, and a sense of how the family interacts with each other and specifically with the child.

18.2.2 Who to Meet With

Who the clinician selects to interview is influenced by the referral question. In general, the clinician should try to get information from as many relevant sources as possible, in order to gain a more comprehensive understanding of the child's behavior and the environments in which the behavior is occurring. Multiple informants across environments also provide useful information for helping the clinician understand the problem behavior by context interaction.

The parents or guardians should almost always be interviewed. During this interview, the clinician will be able to obtain several types of information. In addition to descriptions of the child's current behavior (problematic, behavioral strengths/positive aspects of their child's personality), developmental and medical history can be acquired. Meeting with the parents also provides the opportunity to explain the diagnostic interviewing process, address informed consent, and obtain an understanding of the parents' perceptions of their son's or daughter's behavioral difficulties. As parents are typically the primary treatment providers for child behavior problems, interviewing parents allows clinicians to begin to understand family dynamics and gauge parental resources as treatment development is considered.

In certain situations, siblings or other family members who live in the household may also be appropriate to interview depending on the situation. For example, if the child is usually taken care of during the afternoons by his grandmother while his parents are at work, the grandmother may be a valuable person with whom to talk.

If problem behavior is being observed at school, at least two teachers should be interviewed about the behavior. Two teachers are necessary to facilitate an understanding of the factors that may be contributing to the occurrence of problem behavior in the school environment. For example, differences in the magnitude of problems seen across classrooms could possibly be related to frustration resulting from learning problems related to a specific subject area. Consulting with teachers also sets the stage for building rapport with the teachers. Having support from teachers is important since many interventions will involve a classroom component.

18.2.3 General Interview Guidelines

The goal of any diagnostic interview is to identify the problem, assign a diagnosis (if it is warranted), and to develop a treatment plan that can be carried out across environments. The ease and ability to carry out these goals depends on the type of diagnostic interview chosen.

There are three types of diagnostic interviews: unstructured, semistructured, and structured interviews. Each one of these approaches offers advantages and disadvantages to their use. An unstructured interview generally does not follow a manualized format, but rather follows the flow of questions and answers that come from a more naturalistic conversation between the child and the clinician. This allows for total freedom in the questions and answers, and may allow the clinician to gather information not touched on in a more structured interview format. However, these types of interviews are not known for their diagnostic accuracy.

A semistructured interview gives the clinician a set of questions to ask, but allows for deviation from the format if the clinician deems it necessary. That is, this type of interview provides the clinician with specific guidelines concerning questions to ask, but allows the clinician and the interviewee the flexibility to branch off into other areas of discussion, hopefully resulting in additional relevant assessment data.

A structured interview has a very strict question/answer format. That is, the clinician follows a very rigid question format and is not allowed to deviate from the questions in order to gain information that is not included in the interview questions. This enhances reliability for the interview, however; aside from identifying symptoms consistent with the DSM diagnoses, it is difficult to assess contextual factors that are essential for treatment development. An advantage of structured interviews is that they are often well-researched and may provide normative data, as well as suggesting the diagnostic reliability and validity of the interview.

Regardless of which type of interview is selected, it is essential for clinicians to set aside adequate time for rapport building by letting the child ask questions, explore the room, play games, and draw while engaging in casual conversation concerning his or her behavior and family/school life. Additionally this format also makes it quite easy for the clinician to provide reassurance to the child if appropriate following sharing of difficult personal history.

It is often best to interview the parents or guardians first, in order to obtain the child's developmental history, including prenatal and birth, as well as current behaviors, and to address any worry the parents may be having about the child's behaviors or the clinician's role in the process. The parents may need reassurance that their child's behavior is not beyond assistance, and may need a clearer understanding of what the clinician is going to be doing, and what the outcome of the assessment process could mean. Parenting style and effective (and ineffective) uses of punishment for unwanted behavior should also be assessed. Parents can also give the clinician an idea of the environmental variables surrounding the problem behaviors. Assessing variables that appear to precede the display of problem behavior and the consequences of the behavior can be obtained from the parents as well. Once this is done, it may be useful to interview the child and the parents together to gain a sense of the dynamic in the family and to allow the clinician time to begin building rapport with the child while the parents are still in the room.

Interviewing the child alone will allow the child to speak more freely than he or she might in front of the parents, and also allows the clinician to observe the child in a one-on-one environment. The way the interview is done will depend on the age of the child, but no matter what age, the interview should be handled slightly differently than one would conduct an adult interview. Begin by playing a game the child likes, or discussing the child's hobbies or interests. Immediately beginning the formal interview may keep the child from being open and willing to participate. Make sure to keep rapport up during the interview process as well. This includes being sensitive to the child's needs, such as when the child may need to go to the restroom, or if it seems the child may be becoming over-stimulated or irritable, and may need a few minutes to relax or to play.

18.2.4 Direct Observations

Directly observing a child in his or her natural environment is often a useful way of obtaining pertinent information, and can be done in either the classroom or the home. Direct observation of the behavior allows for the identification of important antecedent and consequence stimuli contributing to the occurrence and maintenance of the problem behavior. Direct observation may also allow the clinician to identify critical variables not recognized by parents or teachers. Moreover, observing the behavior in the context in which it occurs will also give the clinician ideas how to best to select and modify target responses.

Although observing unobtrusively in the home is ideal, it is often not practical. Observing the family together in the therapy room can be a reoasonable substitute for a home observation. It is often easier to engage in direct observation in a school setting. Often times the clinician may need to send someone else who the child does not recognize to observe to ensure more natural behavior. In a school setting, the observer can likely be viewed as a student teacher. Obviously, it is imperative that the teacher gives no obvious signals that the child is being observed, and the teacher should identify the child to the observer, if necessary, quietly and discreetly.

18.2.5 Additional Assessment

Depending on the referral question, it may be useful to have the guardian sign a release form to allow the clinician to obtain records or to talk to the child's primary care physician. From the physician, the clinician can obtain a complete medical history, including illnesses, surgeries, injuries, and developmental information that may not have been known by or imparted by the guardian. If the child has any history of mental health care, a release should also be obtained to communicate with the mental health professional as well. Finally, sometimes a more formal assessment may be warranted. That is, a complete picture of the child may require an understanding of the child's level of cognitive and academic achievement. These forms of assessment will be addressed in further detail later in the chapter.

18.3 Case Illustration

Robbie N was a 9-year old Euro-American male referred by his teachers and assistant principal for difficulties in school. He was brought to the interview by his 40-year old mother, Mary N. His father was not present. Robbie's 5-year old sister, Jane, was also not present. Mrs. N reported that she had been called into the assistant principal's office several times because of Robbie's disruptive behavior in class, and that Robbie's third grade teacher had sent home several notes describing Robbie's inability to sit still, stay organized, and concentrate during class. Because of these behaviors, Robbie was frequently not able to complete his in-class work, and his grades had been slipping. Mrs. N seemed distressed by these reports and by her visits with the assistant principal. She also noted that similar behavioral difficulties were occurring at home.

In the first meeting with Mrs. N, the clinician first discussed informed consent and the process of a diagnostic interview. The large part of the first meeting involved the clinician attempting to gather information from Mrs. N regarding the problem behaviors, including a description of the behaviors as well as a history of Robbie.

Clinician: What brings you here today?

Mrs. N: Robbie's really been struggling in school. I've been called to have a meeting with assistant principal several times, and his teacher, Mrs. A, is always sending notes home about Robbie. She says he can't sit still and rarely finishes his class work.

Clinician: What's he like at home?

Mrs. N: Oh, he's really sweet, always wanting to help me out and play with his sister. But I know what his teacher is talking about. I can't get him to sit down and do his homework! He's always been a little hyper and fidgety, but it never mattered before. Now that he's in third grade, his homework takes longer than it used to, and I just can't get him to sit long enough to work through it. After about 5 or 10 minutes of fidgeting in the chair, he's up and off and playing with his sister or running around in the back yard. I know he's not getting it done in time, but I don't know what to do! He also struggles with putting away his clean laundry when I ask him to and a lot of other little things around the house.

Clinician: What do you usually do when this happens?

Mrs. N: I get so frustrated! I've tried everything. I've even taken away his TV time until he has put everything away – and it's not that much! But he won't. He just throws a tantrum when he tries to turn on the TV and I tell him he can't. But even if I go in to his bedroom and stand there, he still can't get through it.

Mrs. N's description of the problem behaviors suggests the possibility that Robbie's behavior was consistent with attention-deficit/hyperactivity disorder (ADHD), as defined in the DSM-IV-TR. For a person to be diagnosed with ADHD combined type a person has to meet 6 of the inattentive criteria as well as 6 of the hyperactive and impulsivity criteria. There are other criteria one must meet as well, such as the behaviors being present before the age of 7, the behaviors causing stress or impairment in work or school, and the behaviors being present in two or more environments.

Clinician: You've mentioned that Robbie has trouble concentrating during his homework, sitting still, and keeping his room organized. Is this something you've noticed for a while or only recently?

Mrs. N: Oh no, his preschool teacher used to call him her "motorboat" because he was always up and around the room and talking non-stop. And I've always struggled with getting him to put away his clothes or do his homework, but it's never been bad enough for him to be failing classes before. He was even a squirmy fidgety baby.

Clinician: Tell me about Robbie's strengths. When is he at his best?

Mrs. N: He's very smart, and loves doing puzzles. When he's doing something he really enjoys, he is much more focused and can work for pretty long periods at a stretch. I would say he's at his best early in the day. He's happy, energetic, wanting to talk with us and tell us about his day. I think he's at his worst though at that time between when he gets home from school and when he eats dinner. He's just grouchy, irritable, and everything is a battle.

Next, the clinician brought Robbie into the room and explained to Robbie the purpose of the visit, as well as observed how Robbie and his mother interacted. After several minutes of letting Robbie get used to the setting with his mother still in the room, the clinician asked to speak to Robbie alone. One goal of meeting alone with Robbie was to explain to Robbie that his mom was concerned that he was having some problems in school and brought him here to see if we could figure out a way to make things better at school. The other goals included determining Robbie's perspective on the behaviors and to observe Robbie's behavior. Ten minutes were spent on building rapport and allowing the clinician to observe relatively natural play behavior before requiring Robbie to sit for the interview. The clinician used the Children's Interview for Psychiatric Syndromes (ChIPS; Weller, Weller, Rooney, & Fristad, 1999), which is a structured interview. The entire administration of the ChIPS takes about 30 min; a portion of the ADHD module, along with Robbie's answers, is provided.

Clinician: Sometimes children behave in a way that causes problems at home or at school. I'm going to ask you about some problems, and I want you to tell me if they ever happen to you. Do you often have trouble paying attention to details?

Robbie: Um, I'm not sure. I don't think so.

Clinician: Do you frequently make a lot of careless mistakes in your schoolwork?

Robbie: Oh, uh-huh. Definitely. I'm always getting points taken off on tests for stupid little stuff.

Clinician: Do you often have trouble keeping your mind on what you're doing, for example, a game, schoolwork, or a project?

Robbie: Not really games, I like video games, but yeah, school work.

[skip]

Clinician: Are you told to sit still a lot?

Robbie: Uh-huh. My teacher tells me that a lot.

Clinician: Do you have trouble staying in your seat, for example, in school or at the dinner table?

Robbie: Yeah.

Clinician: Do you get in trouble a lot for running or climbing?

Robbie: Um….I don't know. I guess…

Clinician: Has that happened so much that it caused you problems at home or at school, like getting yelled at a lot or punished?

Robbie: Um…yeah. Yeah, my teacher's always yelling at me on the playground cause I'm climbing on stuff we're not supposed to climb on.

The "yes" or "no" format of the interview does not allow the clinician to probe following the child's response; however, clinicians are encouraged to probe if the answer seems vague. Additionally, the clinician can ask about the duration and level of impairment. After the interview with Robbie, the clinician gave Mrs. N two copies of the home edition of the Attention Deficit Disorder Evaluation Scale (ADDES-3; McCarney, 2004) for Mrs. N and her husband to fill out as well as two teacher versions to be completed by Robbie's homeroom teacher, and a subject teacher such as a language arts teacher or computer teacher. The clinician also set up a time to have the following unstructured interview (via phone) with Robbie's teacher.

Clinician: So tell me, what behaviors are you noticing from Robbie?

Teacher: Well first, he absolutely cannot stay in his seat. At the beginning of the year, he would just get out of this chair and wander around the room during class! I reduced that behavior considerably, but he also asks to use the bathroom or get a drink of water every five minutes. I know it's just because he wants to get up.

Clinician: Have you noticed anything else?

Teacher: He seems to have a hard time concentrating during assignments. He'll work for a few minutes, but then stop and start drumming his pencil on his desk, drawing on his paper, or get out of his seat, and nothing I do gets him back on track for very long. He almost never finishes his work in the time allotted.

The clinician also recognized the importance of observing Robbie not only in the office but also in his classroom. This would help bring together the information the clinician had already received from the interviews and the rating scales, as well as the observations from the interview with Robbie. During the interview, Robbie was rarely in his seat, and he answered most of the questions while walking around the room, looking at pictures, and touching the objects on the desk. Several times a question had to be repeated, because Robbie was focused on something else. Also, there were a few small differences between the reports of the parents and that of the teachers in that the teachers reported more hyperactive behavior than the parents.

Robbie was observed in his homeroom class, his art class, and during his lunch time by the clinician's assistant, who took notes recording the number of times Robbie engaged in off-task behaviors. Robbie was observed engaging in similar behaviors as observed in the interview and reported by the parents and teachers, for example, getting out of his chair or trying to get out of his chair frequently, and not finishing his assignments on time due to off-task behaviors.

When making the diagnosis, the clinician reviewed and brought together all the information gathered, including the various interviews, rating scales, and direct observations. It was clear from the interviews that the behavior was occurring at home and at school, and it was evident from the interview with Robbie's mother that these behaviors had been present since before age 7, which was corroborated with information received from Robbie's pediatrician. In the interview Robbie also reported several behaviors consistent with ADHD combined type in his interview, and direct observations corroborated these statements. The scores on the parent and teacher versions of the ADDES indicated clinically significant levels of symptoms of ADHD, as did the scoring of the ChIPS. The ChIPS also aided the clinician in making sure that there were no other comorbid conditions. Because of this, the clinician diagnosed Robbie with ADHD combined type, and offered his parents several recommendations for treating Robbie's problem behaviors at home and at school.

18.4 Recommendations for Formal Assessment

In addition to interviewing, there are several standardized assessment tools that can be used to help a clinician determine the appropriate diagnosis. These fall into three general assessment categories: cognitive/achievement, personality inventories, and behavioral rating scales (wide band and narrow band). Cognitive and achievement tests are used to assess intellectual abilities and whether or not those abilities match up with a person's ability to succeed in school or work. Often cognitive assessments such as the Wechsler Preschool and Primary Scale of Intelligence-Third Edition (WPPSI-III; Wechsler, 2002) and the Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV; Wechsler, 2003) are used in conjunction with achievement assessments, such as the Wechsler Individual Achievement Test-Second Edition (WIAT-II; Wechsler, 2001), to identify learning disabilities.

Personality inventories are sometimes used in an attempt to determine whether there are personality characteristics that contribute to the child's difficulties. Assessments such as the Minnesota Multiphasic Personality Inventory – Adolescent (MMPI-A; Butcher et al., 1992) are considered wideband assessment tools; that is, they assess several areas of behavior and often are composed of hundreds of questions and can take hours to complete.

The Behavioral Assessment System for Children: Second Edition (BASC-2; Reynolds & Kamphaus, 2004) and the Child Behavior Checklist (CBCL/4-18; Achenbach, 1991) are behavior rating scales and other examples of wide band assessment tools. The BASC-2 is standardized for people aged 2–21, and has self-rating scales, as well as parent and teacher rating scales. It also has forms for developmental history and observed behavior within the classroom.

The CBCL/4-18 is standardized for 4-year olds to 18-year olds; a preschool version also exists for 2- to 3-year olds. Like the BASC-2, the CBCL/4-18 has a parent/guardian rating scale, a teacher rating scale, a youth self-report form, and a direct observation form. It also contains a semistructured interview that may be given to children. Wide band assessments can aid the clinician in making accurate diagnoses based on the DSM-IV-TR as well as ruling out the possibility of comorbid diagnoses.

An example of a narrow band assessment is the ADDES, which is specifically created to assess ADHD, but is not terribly useful for diagnosing other disorders. Another example of a narrow band assessment is the Beck Depression Inventory: Second Edition (BDI-II; Beck, Steer, & Brown, 1996), which can be used on persons 13-years old and older to detect depression. Narrow band assessments generally have anywhere between 10 and 50 questions and can usually be filled out in 5–15 min.

Wide band assessments can be very useful particularly because of their practical basis. However, the amount of time and the level of literacy required can often be overwhelming for some parents. Narrow band assessments are easier and less time consuming to complete. Since these instruments typically have child, parent, and teacher versions, it facilitates the clinician's ability to gather information from multiple sources in a relatively cost-efficient manner. It is important to be sensitive to developmental and child behavioral issues to determine the appropriateness of asking a child to complete any of these measures.

It is always essential to ensure that the instrument is standardized for the age and population. Moreover, it is also important to consider cultural factors and child language skills when determining the value of any assessment instrument. Assessments are high stakes testing, and choosing a proper assessment should be done carefully and with regard for the psychometric properties of the instrument.

18.5 Standardized Interview Formats

18.5.1 Structured Interviews

18.5.1.1 The DISC-IV

The Diagnostic Interview Schedule for Children (DISC) is a highly structured diagnostic interview that was designed for use by clinicians and nonclinicians. Its first incarnation was created by the National Institute of Mental Health (NIMH) in 1979, and the current version, the DISC-IV, has been available since 1997. Revisions for the newest version were designed to aid in the diagnosis of more than 30 psychological disorders found in children and adolescents, based on the criteria in the DSM-IV and the International Classification of Diseases-Tenth Edition (ICD-10; World Health Organization, 1993). Other changes included revising unreliable questions from earlier versions, as well as adding sections that touched on symptoms of schizophrenia and substance abuse, making the DISC-IV more compatible with interviews used with adults and therefore makes the research and diagnostic findings more easily comparable (Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). Training for the DISC can be achieved by clinicians and laymen in less than a week, and include live and videotaped demonstrations, practice interviews, and a full understanding of the rules of the interview, especially some of the complex components such as using the timelines correctly and knowing when to skip questions.

The DISC-IV consists of two separate interviews: the DISC-Y (Youth), meant for direct administration to children 9 through 17, and the DISC-P (Parent), which can be used with parents of children as young as 6 and through the age of 17. The DISC-P asks the same questions about behaviors as the DISC-Y, but with different pronouns (e.g., “Did you feel___” in the DISC-P becomes “Did he seem ____” in the DISC-P.) There are almost 3,000 questions included in the DISC, but only 358 of those are “stem” questions to which every person interviewed must respond. If the interviewee responds positively to a question, the interviewer then asks one of about 1,300 “contingency” questions, which involve discovering the frequency, duration, and severity of the behavior. On top of those, there are 732 questions involving age of onset, severity of impairment, and past history of treatment for the positively endorsed symptoms, which are only asked if a clinically significant number of the questions in a certain section have been endorsed. At the end of the interview is an optional “whole life” module that may help the clinician delve deeper into the lifetime prevalence of reported symptoms (Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). However, a clinician may choose not to administer all the sections (e.g., a child referred for the possibility of ADHD need not be asked the schizophrenia module questions). The symptomology time frame for the DISC-IV looks at the last 12 months as well as the last 4 weeks. This ensures that time frame will include the school year, as well as acute current symptoms.

Although the DISC can be scored manually, this is a cumbersome process and prone to errors. Computer scoring is instead preferred, with the option of scoring the parent and youth versions as two separate entities, or combined, allowing a symptom or criterion to be considered present even if only reported by one of the interviewees. The DISC-IV is careful to follow precisely the DSM-IV and ICD-10 diagnostic criteria for diagnosis precisely. Although it is difficult to find psychometric data on the DISC-IV, a recent study (McGrath, Handwerk, Armstrong, Lucas, & Friman, 2004) looked at the concurrent criterion validity of the ADHD section, and found that both the DISC-Y and the DISC-P showed significant agreement with an independent diagnosis by a clinician (i.e., the clinician did not use the DISC-IV to make a diagnosis).

18.5.1.2 CAPA

The Child and Adolescent Psychiatric Assessment (CAPA; Angold et al., 1995) is a structured interview meant for people between the ages of 9 years and 17 years, and gives the interviewer a way to collect information on onset, duration, frequency, and severity of symptoms, following the criteria of the DSM-IV, the DSM-III-R, and the ICD-10. The interview has parallel versions to be administered to the children and the parents, both of which if done in their entirety take about an hour to complete. The CAPA looks at a time frame of the last 3 months, and is broken down into modules: disruptive behavior disorders, mood disorders, anxiety disorders, eating disorders, sleep disorders, elimination disorders, substance use/abuse/dependence, tic disorders, and other disorders such as posttraumatic stress syndrome, somatization symptoms, and schizophrenia. This module system allows the clinician to administer modules on their own, without having to give the entire hour long interview.

The CAPA includes an extensive and detailed glossary, which defines, explains, and operationalizes symptoms and criteria in an attempt to minimize subjectivity and aids in following the criteria as laid out in the DSM and ICD-10. Scoring is achieved by entering the information obtained during the interview (except for the “observations” section) into a computer program, which can give a diagnosis based on the DSM-III-R, the DSM-IV, or the ICD-10.

It is recommended that the interviewer have at least a bachelor’s degree, and though many people who use the interview are trained clinicians, psychologists, psychiatrists, and social workers, it is not necessary. Training takes about a month, with half the time being spent learning about the interview and the other half practicing. After training, one can be certified by a CAPA trainer, which is required before using it in a diagnostic context. When used by a trained interviewer, the CAPA has generally positive psychometric outcomes, with a test–retest reliability coefficient (k) value ranging from 1.0 for substance abuse and 0.9 for major depression, to 0.5 for oppositional defiant disorder and 0.55 for conduct disorder. Although it is difficult to test for the validity of a diagnostic interview, the CAPA’s rate of diagnosis according to age and gender seem to match up fairly well with current statistics (Angold & Costello, 2000).

18.5.1.3 ChIPS

The Children's Interview for Psychiatric Syndromes is designed for administration with children from 6- to 18-years old with an IQ of at least 70, and is composed of two parallel parts, the ChIPS, which is administered directly to the child, and the P-ChIPS, which is administered to the parents or guardians. The ChIPS is composed of 15 sections that screen for Axis I disorders as defined by the DSM-IV, and two sections that screen for things such as abuse and neglect. Like the DISC-IV, the ChIPS has initial questions that are asked to every interviewee, and then follow-up questions if the question is endorsed. The exceptions to this are the two sections involving abuse and neglect, where all questions are asked. The amount of time it takes to complete the interview ranges from 21 min for a community-based sample to 49 min for an in-patient sample, and can be administered by trained laypeople who have at least a bachelors degree and work in the mental health field. However, to be most effective as a tool, it is suggested that it can be used as a screening to save a trained professional's time during the diagnostic process.

Scoring involves a separate booklet that is used to record the responses of the interviewee, which line up in a column according to disorder, with the DSM-IV criteria for diagnosis at the bottom of each column (Weller, Weller, Rooney, & Fristad, 1999). A 1998 study looking at the concurrent criterion validity found that sensitivity was 80% and specificity was 78% when compared with a psychiatrist's diagnosis (Teare, Fristad, Weller, Weller, & Salmon, 1998). Later studies have shown varying sensitivity and specificity, depending on the population assessed and the version of the interview that is used (Weller et al., 2000).

18.5.2 *Semistructured Interviews*

18.5.2.1 ISCA

The Interview Schedule for Children and Adolescents (ISCA; Kovacs, 1997) is a semistructured interview that was designed to assess mainly mood disorders in children aged 8–17 years. There are two versions of the interview: the ISCA, which is designed as an intake interview, and a follow up interview, called the FISA, used for reevaluations in those 18 years and older.

The ISCA and its follow up both contain five sections as well as an item determining global functioning and overall impairment. The five sections cover symptoms and signs, mental status, behavioral observations, clinician impressions, and developmental milestones (Sherrill & Kovacs, 2000).

It is recommended that a trained clinician administer the ISCA, which begins with open-ended questions about general functioning and history, followed by more structured questions, all of which must be asked. Scoring occurs by taking data obtained by the parent and the child, and getting an "overall" rating, to best evaluate and discern the "reality" of the behavior. Administration can take two or more hours with the parent or guardian and 45–90 min for the child. Sherrill and Kovacs (2000) list the diagnoses that can be directly derived from the ISCA and the FISA.

Interrater reliability was high for the ISCA, parent–child agreement was moderate to high across many diagnoses, but was strongest for externalizing disorders, and predictive validity studies of specific disorders diagnosed by the ISCA have shown high predictive value. The ISCA also seems to be sensitive to changes in a child's symptoms during treatment or over time.

18.5.2.2 K-SADS

The Schedule for Affective Disorders and Schizophrenia for School-Aged Children (K-SADS; Puig-Antich & Chambers, 1978), also known as the "Kiddie SADS" is a semistructured interview meant for children aged 6–18. There are three versions of the K-SADS: the K-SADS-E (epidemiological) and the K-SADS P/L (present/lifetime) both look at epidemiology whereas the K-SADS-P IVR (present) evaluates the present state of the child. All three forms involve interviewing both children and parents, and all three types can aid in making a DSM-IV diagnosis. All versions cover affective disorders, anxiety, behavioral problems, eating disorders, psychotic disorders, and substance abuse, though whether it can be used to make a full diagnosis or simply a screen for certain sections depends on which version is being used. Only the K-SADS-PL covers tic disorders, encopresis, and enuresis (Ambrosini, 2000).

Training is required to administer the different versions of the K-SADS. An understanding and knowledge of symptoms and diagnoses is also necessary as it facilitates the semistructured aspect of the interview. The semistructured component of the interview allows the clinician to tailor follow up questions to the individuality of the child and his or her environmental context. Administration can require as long as an hour and a half for the parent interview and an hour and half for the child interview. Scoring is done by taking the information obtained from the parent interview and the child interview and creating a summary score for each symptom. Joint test–retest reliability of all three versions in a small sample was 1.0 for MDD, generalized anxiety disorder, separation anxiety disorder, and oppositional defiant disorder, and was 0.8 for ADHD. Concurrent validity of the K-SADS-PL when compared with children who had already been diagnosed was generally good (Kaufman et al., 1997).

18.5.2.3 DICA-R

The Diagnostic Interview for Children and Adolescents – Revised (DICA-R; Reich & Welner, 1998) is a semistructured interview for children aged 6–17 that follows to diagnostic criteria of the DSM-III-R, DSM-IV, and ICD-10. There are three versions: the DICA-R-C for children aged 6–12, the DICA-R-A for adolescents from age 13 to 17, and the DICA-R-P, which is given to parents. Although the wording of the questions is precise, the creators of the DICA consider it to be a semistructured interview because “it does provide ways of deviating from the instrument,” including completely deviating from the format to better explain questions or terminology. However, the most effective ways to do this are explored during training (Reich, 2000). Any answer that seems to be a “yes” or a “maybe” is probed for further information and clarification. Test–retest reliability was shown to be acceptable to good, with a *k* range of 0.32 for ADHD in 6- to 12-year olds, to 0.75 for past separation anxiety in 13- to 18-year olds. Kappa values for older children were generally higher, and internalizing disorders tended to have a higher *k* value than externalizing disorders.

18.6 Impact of Race, Culture, Diversity, and Age

Clinicians must be mindful of issues of diversity and the child’s age throughout the diagnostic interview and treatment planning process. As noted earlier, children are developing, and as such their behavior changes over time. To accurately interpret the meaning of children’s behavior, it must be viewed within the developmental and environmental context in which it occurs. Familiarity with developmental milestones and the normal variation around those behaviors will assist the clinician in discriminating whether the behavior is a problem or within the acceptable range of developmental variation. For example, bedwetting is considered normal for a child just being potty trained, but is considered enuresis in a 10-year old for which behavioral interventions are deemed necessary.

Sattler (1998) provides a useful table of developmental milestones across several domains. In addition to being familiar with these milestones, experience interacting with a broad range of age groups is an effective means of calibrating child growth and development. Volunteering in a school is an effective way to quickly learn by observing developmental behavioral differences across children of different ages.

Related to development is the impact of age on symptom presentation. As previously mentioned, the DSM details developmental differences in symptom presentation. It is essential that clinicians working with children are well-versed in these issues.

Cultural issues must also be taken into account not only when making a diagnosis, but also throughout the interview process as well. It is inappropriate to draw cultural boundaries along ethnic/racial lines, and sensitivity to subtle differences within and across similar cultures is required when factoring in the impact of the child’s and the family’s cultural background. The family’s cultural views may influence willingness to be involved in the diagnostic process, feelings about psychological diagnoses, as well as what behaviors are viewed as within the normal range and which are not. Symptom presentation may also differ across cultures, and when a clinician is not aware of cultural differences, or uses assessments and interviews standardized primarily on Euro-American children, this may lead to overpathologizing some populations and underdiagnosing others. For example, Asian populations tend to show more somatic symptoms such as nausea than other cultures (Hsu & Folstein, 1997). Semistructured and structured interviews greatly improve accurate diagnoses of non Euro-American cultures when compared with their unstructured counterparts; however, it is important to remember that most diagnostic interviews are standardized with Euro-American populations.

It is important to recognize that there is often as much diversity within cultural groups as between them. Consulting someone knowledgeable in a particular culture is recommended, but be aware that generalizations about a culture will not always apply to a specific family or person. Additionally, people in ethnically diverse populations may be struggling with poverty, prejudice, assimilation, or language issues that may be relevant to the diagnostic process. The clinician should keep in mind that many cultures remain grossly underrepresented in the mental health literature, meaning that one must tread exceptionally carefully during both the interview process as well as diagnosis.

Language may play a large part when dealing with diverse populations. There may be times when, even though the child speaks fluent English, the family surrounding the child does not. In such a case, it would be ideal to give the diagnostic interview to someone who is able to speak fluently in the family's first language, and to use a diagnostic interview that has been validly translated into that language. Even when the same language is shared by the family and the clinician, an understanding of where the family is from will keep the clinician from using localized idioms or phrases that the family or child may not understand.

The diagnostic interview process may also be largely affected by the family's culture. For example, in some African and Middle Eastern cultures, asking a direct question to certain members of the population is considered offensive. Even asking "How did you sleep last night?" may not be considered appropriate. In such cases, a standard Western diagnostic interview, usually consisting of hundreds of direct questions, would be inappropriate. In other cultures, it is customary to make several minutes of polite conversation before beginning any official inquiry. Being aware of such cultural norms can keep the clinician from making mistakes that affect interview outcome.

18.7 Information Critical to Diagnosing

Guided by the referral question, the diagnostic interview involves gathering information concerning symptom frequency, severity, and duration. Information should be gathered from several different sources. The clinician should also keep in mind the environmental factors that may affect behavior, such as family interaction, parent and teacher competencies and abilities to manage children, family history of pathology, or a change in environment, such as a divorce, that may have precipitated the behaviors.

The quality and quantity of information gathered are also important factors. Precisely written medical records obtained from the pediatrician are more reliable than the father's memory of when a surgery occurred or when little Johnny had a mild concussion. The amount of time the person spends with the child also adds to the quality of the information. If the child spends 5 days a week with the grandparents, and only 2 days with the parents, the grandparents may be a better source of daily observation information than the parents. The same can be said for teacher interviews; a child's homeroom teacher will have more of a sense of the child's daily behavioral patterns than an art teacher who may only see the child for an hour a week. The quantity of information is exactly what it sounds like: getting as much information as possible from as many different sources and environments, to see if the reports correspond with each other and if the behavior is seen across situations.

18.8 Dos and Don'ts

Do spend some time building rapport with both the child and the child's parents or guardians. Spend time drawing, playing games, or engaging in casual conversation with the child before beginning the formal interview. Do answer any questions that may be causing anxiety for the child or the parents. Do be honest and upfront about your role in the diagnostic process and what a diagnosis might mean for the child.

Do not speak condescendingly or judgmentally to the child or the parents. Do not act as though the child's behavior is the parents' fault. Do not use overly long words or "psychobabble" that are confusing and meaningless for most people, and may only heighten anxiety.

18.9 Summary

It was the intention of this chapter to provide students and clinicians with an overview of the diagnostic interview process as it applies to children. The chapter began with a discussion of the special circumstances that must be taken into account when working with children, including the matters of confidentiality and informed consent. Next, proper interviewing guidelines were discussed, including who to meet with, the importance of the referral question, and the different ways and sources from whom to gather information. A case illustration was provided as well as an overview of recommendations for formal assessments. A description of several structured and semi-structured interviews was followed by a discussion of culture, age, and diversity, and a list of diagnostic interviewing do's and don'ts. The diagnostic interview and the basic assessment process are the starting point of the therapy process. Well-developed diagnostic interviewing skills are an essential component of successful intervention.

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Chapter 19
Sexually and Physically Abused Children

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19.1 Description of the Population

Child physical abuse (CPA) and child sexual abuse (CSA), although not psychiatric disorders, are prevalent and stressful life events that often result in the need for mental health interviewing services. The US Department of Health and Human Services (2008) recorded 142,041 cases of CPA and 78,120 cases of CSA reported to Child Protective Services (CPS) in the United States in 2006. These data are probably an underestimation, as many incidents of child abuse are not reported. Multiple factors, including the child's developmental level, race, ethnicity, abuse severity, and relationship with the perpetrator influence whether the abuse is disclosed (Hanson et al., 2003; Paine & Hansen, 2002). However, disclosure does not necessarily mean that the abuse is reported. For example, a national survey of adolescents found that 65% of physical abuse cases and 86% of sexual abuse cases experienced by the adolescents surveyed were never reported to authorities (Kilpatrick, Saunders, & Smith, 2003).

The sequelae of abuse vary considerably, and there is no single pattern that typifies postabuse distress in children. In fact, not all children who are abused will display psychiatric symptoms or functional impairments (Haskett, Nears, Ward, & McPherson, 2006; Kendall-Tackett, Williams, & Finkelor, 1993; Putnam, 2003) and those who do show symptoms are a heterogeneous group presenting with a wide range of symptoms including posttraumatic stress disorder (PTSD), depressive disorders, anxiety disorders, and behavioral disorders (i.e., conduct disorder, oppositional defiant disorder, and attention-deficit/hyperactivity disorder; Kaplan, Pelcovitz, & Labruna, 1999; Putnam). Sexually and physically abused children are at increased risk for suicidality, alcohol and drug abuse, risk-taking behaviors, socioemotional problems, and cognitive and academic difficulties (Kaplan et al.; Nagy, Adcock, & Nagy, 1994; Watts-English, Fortson, Gibler, Hooper, & De Bellis, 2006).

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Furthermore, CSA has been associated with childhood sexualized behavior problems and risky sexual behavior (Putnam; Senn, Carey, & Vanable, 2008) and CPA is specifically linked with aggression and delinquent behavior (Kaplan et al.).

Mental health practitioners perform two distinct roles when conducting interviews with children who may have been maltreated: forensic interviewer and diagnostic or clinical interviewer. Forensic interviews are intended to determine the likelihood that abuse has occurred whereas diagnostic or clinical interviews focus on the psychological effects of abuse as well as any other existing psychological problems. Clinical interviews may be designed to generate psychiatric diagnoses, assess emotional distress, recognize behavioral sequelae of abuse, evaluate family support, identify maladaptive abuse-related cognitions, or formulate treatment plans. Because the potential functions of initial assessment interviews with maltreated children vary, this chapter uses the term "clinical interview" to include both the diagnostically focused interview and those with diverse goals. Given the distinction between the purposes and procedures of the forensic and the clinical interview, many sections of this chapter cover forensic and clinical interviews separately.

19.2 Professional Issues in Forensic and Clinical Interviewing

In forensic interviews, a rigorously neutral position is critical. Information obtained through the forensic interview process is often evident in criminal, civil, or juvenile court proceedings; therefore, the interviewer must ensure that information is obtained with an objective stance toward the allegations (Mannarino & Cohen, 2001). The level of objectivity in clinical interviewing depends on the purpose of the interview. In some cases, the interview is an integral part of a psychological evaluation. As an evaluator, the clinician maintains a relatively neutral stance that mirrors the objectivity of the forensic interviewer, although the psychological evaluator's focus is on the child's mental health problems and socioemotional functioning rather than on the veracity or details of the abusive experience. In other situations, the clinician is beginning a therapeutic relationship by means of an interview designed to generate either diagnostic or problem-specific assessment. The therapist functions as a supportive advocate with less neutrality than either the forensic interviewer or the psychological evaluator (Mannarino & Cohen).

Before beginning either a forensic or clinical interview, the mental health practitioner should clearly explain his or her role and assure that the child understands, in an age-appropriate fashion, how this role affects confidentiality. Limits to confidentiality differ among forensic, psychological evaluation, and therapeutic interviews, and children (along with guardians who provide consent) have a right to know about these limits before the interview begins. Most of the information elicited in forensic interviews is not confidential, is likely to be reported to the police or CPS, and may be provided as evidence in court proceedings. When a child participates in a psychological evaluation, much of the information is shared with parents, therapists, child protection workers, or the Court as well. On the contrary, most information obtained in an initial therapeutic interview is kept private and confidential, but limits to this confidentiality exist and should be clarified. In particular, all 50 states have mandated reporting requirements for mental health care professionals as required by the Keeping Children and Families Safe Act of 2003 (Child Welfare Information Gateway, 2004). While clinical interviewers often work with children after abuse has been reported to appropriate authorities, the interviewer should explain that any new or unreported instances of maltreatment must be reported. Although clinical interviewers are sometimes called to testify as fact witnesses regarding a child's mental status or diagnosis, it is generally recommended that they avoid providing testimony as to whether or not abuse occurred (Mannarino & Cohen, 2001).

19.3 Procedures for Gathering Information

19.3.1 The Forensic Interview

Who to include in the interview. The American Professional Society on the Abuse of Children Practice Guideline (APSAC, 2002b) recommends that children be seen for forensic interviews individually because caregivers may influence the content and course of an interview. This is especially important if a caregiver is accused or suspected of maltreatment. In fact, many agencies that conduct forensic interviews do not allow alleged perpetrators to accompany children to appointments. When a child refuses to separate from a caregiver, the caregiver can be included in the initial portion of the interview and then asked to leave the room before abuse incidents are discussed. Santtila, Korkman, and Sandnabba (2004) found that the physical presence of a person related to the child (a) increased the likelihood that interviewers used suggestive questioning strategies, (b) decreased the descriptiveness and clarity of the child's responses, and (c) increased the likelihood that the relative would answer questions on the child's behalf. Conducting the forensic interview with the child individually eliminates the possibility that the child's ability or desire to provide a full and accurate disclosure will be affected by the presence of the caregiver.

Collecting background information. Many experts recommend that, before beginning a forensic interview with a child, the interviewer attempts to collect background information from a variety of sources including law enforcement, CPS, and medical professionals who have examined the child following the abuse (Carnes, 2000). However, others recommend allegation-blind interviewing to decrease the use of leading questions and, possibly, increase rates of disclosure (Cantlon, Payne, & Erbaugh, 1996). In addition, separate interviews with nonoffending caregivers can also provide helpful details about family structure, the child's routines, and social and developmental history. Ensuring effective coordination among agencies prevents the occurrence of multiple interviews, which can compound psychological stress for victims and families or reduce the accuracy of the child's statements (Smith, Witte, & Fricker-Elhai, 2006).

Use of child advocacy centers. Child advocacy centers (CACs) are child-friendly facilities staffed by trained professionals who use a multidisciplinary approach to conduct forensic interviews and medical examinations, in addition to providing victim support and advocacy, mental health services, and community training and prevention activities. When a child is brought to a CAC following an allegation or suspicion of abuse, a single interview is conducted by one person while other members of the multidisciplinary team (MDT) watch through a one-way mirror or closed circuit television (Smith et al., 2006). Research comparing the CAC model to traditional methods of investigation in which multiple agencies work independently has shown that the CAC model is effective in improving service coordination and quality for victims and their families (Cross, Jones, Walsh, Simone, & Kolko, 2007; Smith et al.). Cases seen at CACs also result in more positive legal outcomes (e.g., more cases filed, more counts charged, higher likelihood that the perpetrator pleads guilty, higher likelihood of felony vs. misdemeanor charges) when compared with those handled by other agencies (Joa & Edelson, 2004; Miller & Rubin, 2009). Therefore, when available, the CAC appears to be a preferable environment for conducting forensic interviews.

19.3.2 The Clinical or Diagnostic Interview

Who to include in the interview. The clinical interview process with sexually and physically abused children typically includes joint as well as separate interviews with the child and the child's caregiver(s). When children are interviewed individually, they may feel more comfortable discussing certain issues such as details of the abuse, their perceived level of parental support, or how safe they feel in their current home environment (Saunders, Berliner, & Hanson, 2004; Urquiza & Blacker, 2005). A separate interview with a child's caregivers allows for discussion of issues that may not be appropriate when the child is present (e.g., mental health problems of other family members, the family's financial situation, etc.) and allows the clinician to protect children from negative opinions that caregivers may express about them (e.g., my child is the source of my problems, my child is a problem child; Urquiza & Blacker). When a caregiver is also the perpetrator of abuse, individual interviews are particularly important. On the other hand, joint interviews with maltreated children and their caregivers provide opportunities to assess caregivers' expressions of belief and support, caregiver–child interactions, and caregiver reactions to the child's behavior. A growing body of empirical literature suggests that nonoffending caregivers' support following disclosure significantly influences the adjustment and functioning of sexually abused youth, including overall level of distress and psychological symptoms (e.g., Elliott & Carnes, 2001; Mannarino & Cohen, 1996; Runyon, Deblinger, Ryan, & Thakkar-Kolar, 2004).

Coordination with involved agencies. Before conducting the clinical interview, it is helpful to gather as much information as possible about the child's and family's current involvement with CPS, law enforcement, and the court system. As a first step, consent for exchange of information must be obtained from the child's legal guardian. Families sometimes have negative views about agencies involved in their case and may be reluctant to consent. The interviewer should explain that collaborative relationships can help the clinician be an effective advocate for the family (Kolko & Swenson, 2002). If the child is under the supervision of the Juvenile or Family Court, the family may have lost the right to refuse contacts with others on the investigative or treatment teams, and collaboration may be Court-ordered.

Evaluating the safety of the child's living environment. An evaluation of the safety of the child's living environment is important, especially when the child is still living in the same home as an offender. Although the forensic interviewer typically determines if safety risks necessitate removal from the home, the clinical interviewer must identify risks that will be addressed in subsequent treatment (Morton & Salovitz, 2006). Safety issues such as parental substance abuse, anger management skills, and poor supervision in the home are important for the clinician to assess so that these problems can become an early target of the treatment process (Saunders et al., 2004). If left unaddressed, safety issues are likely to become barriers to effective treatment. For example, treatments for children with PTSD often include repeated exposures to abuse-related cues with the goal of reducing the child's conditioned fear response (for a review, see Runyon et al., 2004). Such strategies aimed at reducing fear responses are only indicated when children are currently living in a safe home environment because feeling fearful and sensitive to danger cues may be functional for children living with a persistent lack of safety (Saunders et al.).

Evaluating the caregiver's beliefs regarding the abuse. It is important for the clinical interviewer to gather information about the caregiver's response to the alleged maltreatment. Both caregiver support and caregiver beliefs about the abuse have been shown to influence treatment outcome for maltreated children (Cohen & Mannarino, 1998, 2000). However, parents are sometimes court-ordered to participate in treatment and may be reluctant to cooperate as a result of feelings of coercion. Non-offending caregiver's opinions about the abuse may also be influenced by their relationship with the offender. Children are often abused by someone they know, and many children are abused by their caregivers (US Department of Health and Human Services, 2008). Therefore, nonoffending caregivers often know abusers well, and may be currently or previously involved in romantic relationships with them. In all cases, it is important for the interviewer to gain an understanding of the caregiver's beliefs about the abuse, his or her willingness to participate in treatment, and the level of support the child perceives from the caregiver.

19.4 Case Illustrations

Names and factual details have been changed significantly to protect the identities of the children and families featured in the following examples.

19.4.1 The Forensic Interview

"Zach" is a 10-year-old boy who was referred for forensic interview services after he made a disclosure of possible sexual abuse to his father. Zach's father and mother are separated and have joint custody of Zach. Zach had told his father that when he visits his mother's house, she makes him sleep in the same bed as she does, that she does not wear clothes to bed, and that she sometimes "rubs" him. Following this disclosure, Zach's father called CPS and was referred to a local CAC for a forensic interview. The interview began with a discussion of Zach's interests and favorite activities. Next, the interviewer discussed the importance of telling the truth during the interview.

Interviewer: So before we talk about why you are here today, I wanted to go over a few rules. The first rule is that we only tell the truth here. Can you tell me the difference between the truth and a lie?
Zach: Yes. A lie would be like something you make up but the truth would be something that actually happened.
Interviewer: Yes. That's a very good explanation of the difference between truth and lie. Another rule that we have for the interview is that if you don't know the answer to a question I ask you, you always tell me. So if I said Zach, what's my dog's name? What would you say?
Zach: I would say I don't know.
Interviewer: That's right. You should always tell me if you don't know the answer to something I ask you. So Zach, can you tell me why you are here today?
Zach: Because I sleep in the bed with my Mom and she doesn't wear her pajamas. I do, she doesn't. And also sometimes she touches me.
Interviewer: How long has that been going on?
Zach: Ummm… I don't really know. We move a lot. So at the last apartment I had a bed, but at the one before that I didn't.
Interviewer: Do you have a bed at the apartment where your Mom lives now?
Zach: Not yet. She says she's going to order one but she hasn't so I have to sleep with her.

The above exchange illustrates the importance of tailoring components of the interview, such as the truth–lie discussion, to the child's developmental level. Zach was able to clearly demonstrate his knowledge of the difference between the truth and a lie, and so the interviewer did not include a more elaborate discussion of this topic in the interview. The exchange also relied on open-ended questions that resulted in Zach providing a great deal of valuable information. Therefore, the interviewer used more specific questions only to encourage Zach to clarify or elaborate on information he had already given. The interview then moved on to a discussion of the inappropriate touching that Zach had told his father occurred when he slept in his mother's bed.

Interviewer: Tell me more about having to sleep with your Mom.
Zach: It's kind of weird because you know, she's my mom, she's a girl, I'm a boy. And I don't like it when she touches me.

Interviewer: Where does your mom touch you?
Zach: All over and the places that make me feel uncomfortable.
Interviewer: Where are the places that make you feel uncomfortable?
Zach: My butt and my hotdog.
Interviewer: Can you point to where your hotdog is?
Zach: (Pointing to genital area.) It means my penis.
Interviewer: Do you remember the very first time this happened?
Zach: Ummm… I don't really know. A long time ago.
Interviewer: Do you remember when the last time it happened was?
Zach: I'm not sure, maybe a few months ago.
Interviewer: When was your last birthday?
Zach: May 23rd. (This was about 3 months before the date of the interview.)
Interviewer: Has it happened after your birthday?
Zach: Yes.
Interviewer: Tell me about the last time that it happened.
Zach: We went to sleep in her bed and she touched me.
Interviewer: Where did she touch you?
Zach: On my butt and on my hotdog.
Interviewer: Where were you when she touched you?
Zach: Lying in the bed.
Interviewer: Can you show me how you were lying on the bed.
Zach: (Demonstrates lying on back.) Like this.
Interviewer: How did she touch your butt when you were lying like that?
Zach: After she touched my hotdog she rolled me over and touched my butt.
Interviewer: Did your mom say anything when she did that?
Zach: No.
Interviewer: Did you say anything?
Zach: No. I pretended to be asleep.
Interviewer: Were you wearing clothes when your mom touched you?
Zach: Yeah. I was wearing my pajamas. But she wasn't wearing her clothes.
Interviewer: Can you show me on the table how your Mom touched you?
Zach: (Rubs table with flat open palm.) She touched me like this. On top of my pajamas.

Zach provided many important details about the abuse in response to the interviewer's questions. Although he was not able to remember specifics about the duration of the abuse, the interviewer was able to help him reference a memorable recent life event (his birthday) so that he could provide information about the length of time between the interview and the most recent abuse incident. By focusing on a recent abuse incident that Zach could remember, the interviewer helped Zach to provide details about the abuse that were likely uncomfortable to discuss. The interviewer used open-ended, nonleading questions whenever possible and used more specific questions mainly for clarification. After a few more details about the abuse were gathered, the interviewer thanked Zach for his cooperation and ended the interview.

19.4.2 The Clinical Interview

"Molly" is a 14-year-old girl who was referred for treatment after she and her siblings were removed from their home because of substantiated physical abuse by their step-father. Molly's mother remained in an intimate relationship with the step-father who had physically abused her children. According to the referral, Molly needed therapy because of the severity of the abuse, her subsequent removal from her home, and her mother's lack of progress in making changes that would allow the children to return to her care. There were no specific presenting problems, other than foster parent complaints that Molly was "mouthy" and unappreciative.

The goal of initial clinical interviews was to develop a therapeutic alliance, determine effects of the abuse and related family disruption on Molly's social and emotional functioning, to assess Molly's safety, and to begin to identify emotional, behavioral, and diagnostic considerations for treatment planning and implementation. The following dialogue took place over more than one interview because trust-building took longer for Molly than it might for an adolescent who did not share her history of abuse and child protective service involvement.

The interview began with talk about Molly's interests and focused for a time on her dating relationships because she seemed eager to talk about her current boyfriend. The interviewer then asked general questions about Molly's personal development and family, to which Molly responded openly and comfortably, before turning to questions about Molly's reactions to the abuse.

Interviewer: Are there things about your step-father that you think are important for me to know?

Molly: I remember waiting for Patrick [step-father] to come home at night. Sometimes he never came, and it was just my mom and the kids and me. We had some good times, watchin' TV, talking. My mom can be pretty cool.

Interviewer: You seem to have some happy memories of being with your mom and the kids.

Molly: You ain't kiddin'. That's what that stupid cow, Liz, [the current case-worker for the family] can't get through her F'in head. We really love each other.

Interviewer: Sounds like you're feeling like a lot of the people making decisions really don't understand how important your family is to you, how much you love each other.

Molly: That's right. You didn't even know us before Patrick came along. Now, it's like everybody's telling my mom what to do and she can't do anything right for them. You don't even know how important it is to us to see our mom and be all together.

Interviewer: I'm sure nobody else knows how precious those nights without Patrick were. I can tell you felt really good just being together with your mom and your brothers. And I can understand how much you must miss it now that you don't live with your mom.

Molly: Yeah…

Interviewer: You haven't said much about what happened on the nights Patrick did come home.

Molly: Sometimes he beat my mom so bad, then he'd beat me, too. I tried to get him to beat me so that my mom wouldn't get beat. Later, he started beating the little kids, too.

Interviewer: That must have been really rough on you. How do you see all of that affecting you now?

Molly: Well, the worst part is it got us taken away from our mom, and now we only get to see her on supervised visits with those brainless scumbags [visitation supervisors] who keep lying to the caseworker about what goes on and getting my mom in more trouble.

As is often the case with referrals from a child protective system, Molly had been asked to repeat her story multiple times for purposes that seemed "pointless" to her. In addition, child protective interventions do not always seem to result in a better situation. After removal from their home, Molly and her siblings were moved three more times to different foster families. In at least one of the placements, the children were inadequately supervised and possibly abused again. It is important to acknowledge children's, and especially adolescents', frustration with many aspects of the system, including its demand on them to repeat painful stories, separation from parents and siblings that they love, and the stress associated with living in foster families they often have never met. At this point, it is clear that one treatment goal for Molly will be to help her regain a sense of power and self-efficacy despite the child protective involvement that she sometimes views as damaging to her and her family.

Another purpose of the clinical interview is to assess current risk in children who have been abused. Molly's foster mother had reported that Molly had been talking about suicide. The caseworker asked Molly's mother to go with her to an appointment with her medical provider earlier in the week to discuss medication changes in response to the foster mother's concerns. At that appointment, the clinician decided Molly's level of risk did not require hospitalization.

Interviewer: Sometimes kids who have been through all the things you have tell me they get pretty depressed, or even hopeless. Do you ever have those kinds of feelings?

Molly: Most of the time, I'm pretty happy. Hangin' with Chad [boyfriend] or my homies at school makes me chill. (Silence for several seconds.) But, yeah, I get pretty depressed other times. I feel like I just want to lay in bed and listen to my music. I want everybody to just leave me alone.

Interviewer: Those sound like hard times for you. What goes through your head then?

Molly: Sometimes I remember a night when Patrick came home drunk and beat me so bad I was all bruised up. I couldn't go to school for a week. It almost feels like it's happening all over again then. (Silence.) Other times, I think, "Would life be better if I were dead?"

Interviewer: When you are wondering about whether you would be better off dead, do you ever think more about what that would be like?

Molly: I know I would never do anything because of what that would do to my little brothers.

Interviewer: It sounds like maybe you do sometimes think about it.

Molly: I think about getting a knife and stabbing myself. A coupla' years ago, I kinda' scratched my arms and legs with a knife. Most of the time now, I just lay in bed and I can see the knife.

The interviewer followed with detailed questions about frequency, persistence, intent, and protective factors related to suicide risk. Molly's responses support the need for ongoing risk assessment and the development of a specific therapeutic goal and plan for keeping Molly safe. In addition, Molly's description suggests possible PTSD symptoms that may lead the interviewer to more structured diagnostic interviewing for PTSD and major depression (see Chaps. 8 and 16 in this book). The interviewer also wanted an enhanced behavioral picture of Molly's depressive episodes or suicidal ruminations to guide treatment planning, and so she asked more about the context.

Interviewer: Do you ever wonder about what gets you into those depressed times?

Molly: It sounds kinda weird, but when Mom left Patrick, I got real upset. (Molly's mother had separated from the abusive step-father recently in an effort to comply with child protective requirements for reunification with her children.) I'm just so sick of getting my hopes up that she'll leave him for good and we'll all get back together. Then she always goes back to him.

Interviewer: So one of the toughest things is feeling your hopes are on a kind of roller coaster ride that you can't control.

Molly: Yeah, but I think something clicked for my mom this time. When Dr. Smith [medical provider] said I might have to go to the hospital because of how much I was thinking about suicide, she [Mom] finally understood what she has done to me and the other kids.

Molly is like many children who have ambivalent feelings about their nonabusive parent or caregiver. Her description of the trigger for her recent suicidal ideation suggests another treatment goal associated with helping Molly find healthy ways to cope with her combination of love, loyalty, anger, hopefulness, and disappointment related to her mother.

19.5 Recommendations for Formal Assessment

19.5.1 The Forensic Interview

Multiple strategies exist to aid clinicians in the gathering of detailed and accurate statements during the forensic interview process. As summarized below, many of these strategies have been examined in the research literature, and some of them appear to be effective at improving the length and quality of children's disclosures.

Allegation blind interviewing. In many cases, details regarding an allegation of abuse will be made known to the interviewer prior to a meeting with the child. The APSAC Practice Guideline (2002b) states that it is acceptable for the interviewer to have prior knowledge regarding the allegations and that this knowledge may aid in the structuring of the interview and in understanding the child. Cantlon, Payne, and Erbaugh (1996), however, suggested that knowledge of allegations increases the likelihood of using suggestive or leading questioning strategies and found slightly higher rates of disclosure in allegation-blind interviews in a study comparing them with nonallegation blind interviews. Regardless of the interviewer's prior knowledge, it is always important that the interview be approached objectively without assumptions regarding the truthfulness of any allegations (Cronch, Viljoen, & Hansen, 2006).

Open-ended questioning. The APSAC Practice Guidelines (2002b) describe open-ended questions as those that allow for a wide range of responses and include little or no information that has already been obtained in the interview. These questions typically ask about who, what, when, where, or how, and are a method for structuring an interview without being suggestive or leading (e.g., "Why are you here to see me today?", "Tell me more about what happened."). The goal of open-ended questioning is to elicit as much information as possible from the child by avoiding questions that lend themselves to yes/no or simplistic answers. In laboratory studies where the accuracy of statements can be verified, open-ended questioning has been shown to produce more accurate descriptions of events than other question types (for a review, see Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007). Additionally, research comparing children's statements to statements made by perpetrators admitting guilt has found that details of the abuse were more likely to be confirmed by the perpetrator when open-ended vs. focused questions were used (Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007).

Although open-ended prompts are generally recommended when asking children to recall abuse events or describe related thoughts and feelings, there is some evidence that open-ended questioning techniques may be more appropriate for older children. For example, in a study comparing the abilities of 3, 5, and 7 year-olds to remember details of a medical exam, 3-year olds required more specific questions to recall events and provided less information in response to open-ended questions than the older participants (Baker-Ward, Gordon, Ornstein, Larus, & Clubb, 1993). Although focused questions can be valuable with younger children, clinicians must avoid leading them to provide inaccurate information by implying too much about the expected response. Children are capable of accurately describing their memories of events as early as the preschool stage, but it has been consistently demonstrated that younger children are particularly vulnerable to suggestive questioning strategies (Bruck & Ceci, 1999). Therefore, specific questions that require simple answers may be used with younger children (e.g., "who else was there?"), but yes–no questions that suggest a response (e.g., "was your dad there?") should be avoided (Peterson & Biggs, 1997).

Cognitive interviewing. Cognitive interviewing relies on memory retrieval enhancement techniques with the goal of aiding individuals in the process of remembering important events (Geiselman, Fisher, MacKinnon, & Holland, 1986). The original cognitive interview protocol, developed by Geiselman and colleagues

(1986) for police officer interviews with eyewitnesses, involves four general strategies based on empirically generated memory principles. These strategies attempt to increase remembering by asking interviewees to (a) mentally recreate the event of interest and the context in which it occurred; (b) report every detail of the event, regardless of perceived importance; (c) describe the sequence of the event in a variety of orders; and (d) describe the event from multiple perspectives. The original protocol was later evaluated for use with children, and children were able to recall correctly more information about a live event (contrived in the laboratory) when interviewed using the cognitive interview technique than when using a standard interview control (Saywitz, Gieselman, & Bornstein, 1992). Recently, components of the cognitive interview have been adapted for use in the forensic interview process and initial evaluations have yielded promising results. In a study evaluating the usefulness of techniques adapted from the cognitive interview, children in the experimental group were given the following instructions designed to help mentally recreate the abuse incident:

> Close your eyes and think about that time as if you were there again. [Pause] Think about what was happening around you. [Pause]. Think about the weather and how you felt. [Pause]. Think of what sounds or voices you could hear [Pause] and what special smells you could smell. [Pause]. Now tell me everything that happened from the beginning to the end as best you can remember (Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2002, p. 433).

Children who were interviewed using this technique gave higher-quality, more detailed responses than those who were taken to the place where the alleged abuse occurred (usually an otherwise-neutral location, such as the child's home) in an attempt to improve memory.

Truth–lie discussions. Truth–lie discussions are commonly used during the beginning stages of the forensic interview to gain an understanding of the child's ability to differentiate truth from fiction and to ensure that the child understands that his or her responses must be truthful (APSAC, 2002b). Common methods used in these discussions include (a) giving examples and definitions of truth and lies, (b) asking the child to create a true and an untrue statement, (c) having the child differentiate between examples of true and untrue statements, (d) asking the child to define the truth and/or a lie, and (e) having a discussion about the consequences of truth- and lie-telling (Huffman, Warren, & Larson, 1999). Truth–lie discussions commonly conclude with the clinician telling the child that only true statements are to be made during the interview. Brief discussions are usually all that is necessary for older children and adolescents, but truth–lie conversations are often more involved for younger children. Huffman and colleagues, using a preschool-aged sample, compared the effects of two types of truth–lie discussions (a) simple truth–lie discussions, where children were asked only a few, closed-ended questions about the difference between truth and lying and (b) complex truth–lie discussions, where children were asked to tell the difference between truth telling and lying, to differentiate between true statements and false statements, and to explain the consequences of lying. Children who participated in the complex truth–lie discussion gave more accurate statements when asked to describe an event contrived by researchers. When working with younger children, relatively elaborate discussions are likely to be more helpful in encouraging truthfulness.

Anatomically correct dolls. Anatomically correct dolls are a controversial tool that are sometimes used with children who have been sexually abused. Critics believe the dolls may be suggestive and overstimulating and, therefore, encourage behavior in nonabused children that may be interpreted as indicative of a history of sexual abuse (for a review, see Cronch et al., 2006). Another concern is that these dolls promote interviewer error by encouraging suggestive lines of questioning, misinterpretation of fairly common play behavior, or inappropriate use on the part of the interviewer (Boat & Everson, 1996). APSAC (2002a) Practice Guidelines indicate that anatomically correct dolls can be a helpful tool in the forensic interview process when used by trained professionals with knowledge of appropriate use and interpretation. The APSAC guidelines provide a comprehensive review of appropriate and inappropriate uses of the dolls and are a helpful starting point for interviewers considering them.

19.5.2 The Clinical or Diagnostic Interview

Clinical interviews rely on the strategies described in detail in the chapter in this book on interviewing children. They must be tailored to the developmental level of the young person and sensitive to her or his family context. In addition, the clinician must elicit information that clarifies abuse-specific effects for both the child and family when interviewing a young person who has been physically or sexually abused.

Determining the effects of the abuse. A unique challenge when assessing the strengths and needs of maltreated children is that the children are often referred for treatment because they have been exposed to maltreatment, rather than because they are displaying symptoms of a particular disorder. Children who have been sexually or physically abused have a wide range of symptom presentations, including anxiety, depression, and behavioral problems, making broad assessments necessary when attempting to determine psychological effects of abuse (Runyon et al., 2004; Saywitz, Mannarino, Berliner, & Cohen, 2000). In addition, not all children show psychiatric symptoms following abuse, and many abused children are quite resilient (e.g., Jaffee, Caspi, Moffitt, Polo-Tomas, & Taylor, 2007).

The clinician needs information about the abuse incident(s) to understand the nature and severity of abuse-related problems, but it is generally recommended that discussion of details of maltreatment occur only after the child is taught strategies for coping with negative emotions (e.g., Cohen, Mannarino, & Deblinger, 2006) and after there is an adequate therapeutic alliance between the child and therapist. Therefore, it is helpful for the clinician to gather as much available information as possible about the abuse from sources other than the child (e.g., a nonoffending caregiver, the professional who has conducted the forensic interview, the caseworker). Information that is likely to be helpful for the initial interview process includes: the relationship of the perpetrator to the victim, the severity of the abuse, the frequency of the abuse, the number of abusers, the use of threat or co-occurring violence, and the duration of the abuse. Each of these characteristics is associated with differences among individuals in patterns of psychological functioning following abuse and, thus important for treatment planning (Lucenko, Gold, & Cott, 2000; Ruggiero, Mcleer, & Dixon, 2000; Steel, Sanna, Hammond, Whipple, & Cross, 2004).

The heterogeneity in symptom presentations among maltreated children creates challenges for assessment and treatment planning. The presence or absence of a psychiatric diagnosis is only one aspect of a thorough assessment, and even children with few or no problems may benefit from intervention (Saywitz et al., 2000). Many children present with problematic abuse-related cognitions and emotional responses that are important targets for treatment even when they do not conform to any psychiatric diagnoses. Maladaptive abuse-related cognitions are common and are targeted in several evidence-based, abused-focused treatments (Cohen, Mannarino, Murray, & Igelman, 2006). A typical thought for many children who have been physically or sexually abused is, “It’s my fault.” Children who experience such self-blame following abuse view aspects of themselves or their behaviors as responsible for the abuse (Feiring, Simon, & Cleland, 2009). These negative and erroneous appraisals are often persistent and have been related to subsequent emotional distress in adults who experienced sexual abuse as children (Whiffen & MacIntosh, 2005). Victims of abuse frequently express strong negative emotions, such as shame (Deblinger & Runyon, 2005), anger, ambivalence, anxiety, and sadness, and an understanding of such emotions guides effective treatment planning.

Assessment of family relationships. Understanding the maltreated child’s relationships with his or her caregivers is a goal of assessment and essential to treatment planning (Saunders et al. 2004). A child’s adjustment following abuse can be affected by caregiver reactions to the abuse, caregiver expectations regarding postabuse functioning, and the level of support the child perceives from his or her caregivers (Elliott & Carnes, 2001; Kouyoumdjian, Perry, & Hansen, 2005). When a child has been abused by a caregiver, it is important for the interviewer to evaluate the child’s thoughts and feelings regarding the relationship with that caregiver. While the tendency is often to focus on the abusive qualities of the relationship, a child’s feelings about the offending caregiver are likely to be mixed and complex (Drach & Devoe, 2000; Saunders & Meinig, 2000). Children may feel guilty about stress or disruption that has occurred in their family following disclosure (Paine & Hansen, 2002). Children often have many positive memories and feelings about the nonabusive elements of their relationship with the offending caregiver (Saunders & Meinig). When the children have been removed from their homes, they frequently experience sadness and anxiety due to the absence of caregivers and siblings and because of disruption in normal routines (Drach & Devoe). Psychological evaluations need to offer clear descriptions of the nature of the child’s relationships with parents, siblings, foster parents, and other significant family members. Although it is beyond the scope of most psychological practice to recommend specific legal or living arrangements for children who have been maltreated, evaluation recommendations provide guidance on the importance of family interactions and family treatment needs.

Assessment goals for child victims of maltreatment include understanding the child’s perceptions of, and reactions to, the relationships and interactions within his or her family (Feindler, Rathus, & Silver, 2003). Such assessment guides the clinician in formulating treatment goals, identifying risk factors, and strengthening supportive factors.

Family stress, low income, low levels of family adaptability and cohesion, maladaptive communication styles, low levels of marital satisfaction, and higher levels of verbal and physical aggression between parents may be more common in abusive families than in nonabusive families (Black, Heyman, & Slep, 2001a, 2001b). Not only have these types of negative family characteristics been associated with greater risk for the occurrence of abuse, but they also likely contribute to postabuse problems for children (e.g., Higgins & McCabe, 2003). In contrast, positive family characteristics such as low levels of stress, perceived family coherence and stability, and constructive postabuse changes (e.g., attending family treatment) are likely related to resilient functioning in maltreated children (for a review, see Haskett et al., 2006).

19.6 Standardized Interview Formats

19.6.1 The Forensic Interview

Structured interviews: The NICHD structured interview protocol. In some settings, forensic interviewers use structured interview protocols in order to elicit informative and accurate statements from abused children. The National Institute of Child Health and Human Development (NICHD) structured interview protocol was developed based on empirical findings and professional consensus on conducting effective interviews with children (Orbach et al., 2000). Field tests of the protocol have been conducted in four countries, and findings have consistently demonstrated that use of the protocol increases the use of open-ended questions, improves the level of detail in children's responses, and decreases the use of suggestive prompts and questions (Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007).

The NICHD structured interview protocol (Lamb, Orbach, Hershkowitz, Esplin, et al., 2007) begins with an introduction of the interviewer, a scripted truth–lie discussion, and rapport-building questions. Next, the interviewer asks the child to talk about recent, nonabusive events for the purposes of gaining an understanding of the child's language abilities. The interview then transitions to a discussion of abuse events. Cognitive interviewing techniques are used to encourage the child to give a free narrative of everything that he or she can remember about the alleged abuse event. The next portion features questions aimed at gathering additional information about the abuse incident that the child has described. This section begins with general, nonfocused, open-ended questions (e.g., "tell me more about that."). If more information is necessary, the interviewer proceeds to more direct questions, focused on information mentioned by the child (e.g., "you mentioned that your father touched you, tell me exactly what he did."). When more than one abuse incident has occurred, the interviewer is encouraged to proceed through the portions of the interview focused on disclosure once again, concentrating on incidents that the child remembers well. The final portion of the interview includes direct questions about important details of events that the child has not provided, if necessary. Whenever direct questions are used, open-ended questions are used as a follow-up to encourage the child to provide as much information as possible.

Although results from studies evaluating the utility of the NICHD interview have been promising, the importance of training and supervision in the successful use of this protocol should be noted. In a field test of the interview protocol, Lamb, Sternberg, Orbach, Horowitz, and Esplin (2002) compared groups of interviewers who received varying levels of training and supervision in interviewing procedures. Interviewers who received short-term, intensive training with no follow-up training or supervision showed little improvement in interviewing practices. However, those interviewers who attended continuing, intensive follow-up training and supervision sessions showed marked improvements in the ability to use the protocol successfully. Thus, it appears that ongoing training and supervision are essential for the NICHD protocol to be implemented successfully.

The extended forensic interview model. The extended forensic interview model was developed by Carnes (2000), based on her experience working with children at the National Children's Advocacy Center in Huntsville, Alabama. The model is intended for use in cases where abuse is suspected, even though the child did not make a disclosure during the first forensic interview. The interview model includes five stages, typically carried out over the course of five separate meetings with the child, and an interview with the nonoffending caregiver. The stages are (a) collection of background information through consultation with other professionals involved in the case (e.g., law enforcement, school officials) and an interview with the nonoffending caregiver; (b) an introductory session with the child that includes rapport building, assessment of developmental level, truth–lie discussion, and discussion of the ground rules of the interview (e.g., telling everything that happened, telling the truth about what happened); (c) a social and behavioral assessment of the child; (d) abuse-focused questioning in which techniques such as open-ended questioning, cognitive-interviewing, and anatomically correct dolls (if necessary) are used; and (e) review and clarification of statements made during abuse-focused questioning and referral for necessary subsequent treatment. It is recommended that the interview process be conducted by graduate-level mental health professionals who are experienced working with abused children and their families, have specialized training, are knowledgeable regarding child development and child abuse, and have experience conducting forensic interviews and testifying in child abuse court cases.

Evaluations of the extended forensic interview model (Carnes, Wilson, & Nelson-Gardell, 1999; Carnes, Nelson-Gardell, Wilson, & Orgassa, 2001) have investigated outcomes with children who have been referred following nondisclosure during an initial forensic interview. In the first evaluation (Carnes, et al., 1999), 47% of the 51 children interviewed made a credible disclosure during the interview, and 71% of the cases with disclosure resulted in successful outcomes in court proceedings. In the second study (Carnes, et al., 2001), conducted in 12 states, 45% of the 147 children made a credible disclosure and 73% of those cases led to successful outcomes in the court. Despite the encouraging findings with children who do not disclose abuse during an initial interview, several criticisms of the model have been raised (for a review, see Cronch et al., 2006). First, requiring that the child be seen for several sessions extends the length of time before decisions can be made with regard to the case and, therefore, can place the child at risk for exposure to continued abuse. As noted earlier, requiring that the child discuss the abuse multiple times can be stressful and/or lead to inaccuracies in disclosure. Finally, the model may blend the role of the forensic interviewer with that of a treating clinician. It is especially important that interviewers using the extended forensic interview model are rigorously trained to avoid using techniques that are helpful during the therapeutic process, but that hinders the forensic process (e.g., praising the child for discussing the abuse).

19.6.2 The Clinical or Diagnostic Interview

Both the structured and semistructured interviews described in Chap. 18 in this book are applicable in evaluating psychological disorders in children who have been sexually or physically abused, including those whose problems predated the onset of abuse. Some research has identified externalizing and/or internalizing problems in children which may be risk factors for victimization (e.g., Black et al., 2001a; 2001b; Stith et al., 2009). Structured interviews are less likely to be helpful in identifying the treatment needs of children who present with subclinical distress or without obvious disturbances.

19.7 Impact of Race, Culture, Diversity and Age on Forensic and Clinical Interviews

19.7.1 Race, Culture, and Diversity

Culture and ethnicity obviously impact children and adolescents who have been abused. Culturally competent interviewers are more likely to gather relevant information and to form strong alliances with children and their families. A family's ethnic or cultural background may also affect the likelihood that forensic or clinical services are sought following maltreatment. It has been hypothesized that culturally influenced feelings of shame regarding either the child's negative emotions or the caregiver's distress influences the likelihood that the abuse or abuse-related symptoms are reported to mental health professionals (Cohen, Deblinger, Mannarino, & de Arellano, 2001). Cohen and colleagues (2001) propose that fear of police or child protective services' involvement may play a greater role in service utilization for ethnic minority families than for Caucasian families. Ethnic minority families may believe that minority children are more likely to be removed from parental custody or that consequences for abusive family members will be more severe for persons of ethnic minority status. Additionally, ideas about what constitutes abuse, especially regarding the use of violence (i.e., corporal punishment), vary greatly across cultures and these varying beliefs likely affect service utilization (Douglas, 2006). As the clinical or forensic interview often occurs during the clinician's first meeting with the child and family, little opportunity exists for employing strategies aimed at increasing service utilization or engagement. However, improving the quality of initial telephone contact between the family and the service agency (e.g., clarifying the need for services, identifying attitudes about previous experiences with mental health care professionals) has been shown to increase the likelihood that ethnic minority families attend their first appointment (for a review, see Mckay, Lynn, & Bannon, 2005).

Ideally, when non-English-speaking children are interviewed following abuse, a clinician conducts the interview in the child's native language. However, when interviewers who speak the child's language are not available, interpreters are often used to aid in the interview process. Trained individuals who are uninvolved in the abuse situation, rather than family members or friends of the victim, should function as interpreters, as children may feel shamed or embarrassed about discussing the abuse or their feelings around friends or family members (Kouyoumdjian, Zamboanga, & Hansen, 2003). Additionally, friends or family members may have personal interests regarding the outcome of the interview (e.g., to avoid psychiatric diagnoses for the child, to substantiate allegations of abuse), and therefore can be tempted to change or alter the child's statements when serving as interpreters (Futa, Hsu, & Hansen, 2001). Lastly, the interviewer should remember that translating standardized assessment instruments originally written in English into other languages does not mean that these measures will produce results with similar validity to the English version (Kouyoumdjian et al., 2003). Only instruments that have been standardized with individuals of diverse cultural and ethnic backgrounds and that offer culture-appropriate norms should be used.

A child's ethnic or cultural background may affect the likelihood that he or she discloses information regarding the abuse or abuse-related symptoms. For instance, a child's culturally influenced sense of collectivism, the tendency to value the needs of the group over the needs of the individual, can affect the likelihood that he or she discusses abuse or related negative emotions (Futa et al., 2001). Children from cultures that emphasize collectivism are likely to be concerned about the impact that discussion of abuse and related difficulties might have upon their families, as these children are taught to place their own needs below those of the larger group. Cultural attitudes regarding sexuality, virginity, and purity can also influence whether a child tells about, or how a child reacts to, abuse (Paine & Hansen, 2002). Cultural values may also influence the likelihood that children report certain psychological symptoms. For instance, children of a cultural background that stresses medical over psychological problems are often more likely to report physical symptoms (e.g., racing heart, sweaty palms, stomach pain) than emotional symptoms (e.g., worry, sadness). While it is essential that the interviewer have knowledge regarding possible effects of cultural values on the interview process, it is equally important that the interviewer understand that individual children will vary greatly in the degree to which they are influenced by the values of their culture (Rodriguez & Walls, 2000). Rather than making assumptions regarding the influence of the child's cultural background, Rodriguez and Walls recommend that the clinician generate questions informed by knowledge of common cultural values. In that way, the clinician can allow the child to be the source of information regarding the extent to which cultural values are relevant to each unique case.

19.7.2 Developmental Considerations

The child's developmental level should always guide choices about interviewing strategies and the interpretation of information gained in both forensic and clinical interviews. Before beginning an interview, the clinician must determine that the child has developed the verbal skills necessary for conversation (Tang, 2006). While the majority of children develop these skills by the age of three, clinicians should avoid making assumptions based solely on age. In addition to individual differences, child maltreatment is related to delays in language development in victims (Eigsti & Cicchetti, 2004). The clinician's use of developmentally appropriate language is important for gathering accurate information. When children are asked questions that contain language they do not understand, they may attempt to answer in an effort to please adults, resulting in inaccurate or misrepresentative statements (Saywitz & Camparo, 1998). During the initial rapport-building stages of the interview, Saywitz and Camparo recommend that the clinician observe the complexity and length of the child's utterances, the grammatical correctness of the child's speech, and the sophistication of the child's vocabulary. Based on these observations, the clinician should attempt to match their own language use to the child's developmental level.

Saywitz and Camparo (1998) also recommend that the content of questions used in the interview be matched to the child's level of cognitive development. In the forensic interview, the clinician should restrict the focus to events that the child is capable of remembering. Children are not typically capable of describing events that occur before they are 2-years old because younger toddlers have not yet formed the ability to encode information verbally (Tang, 2006). However, they may be emotionally affected by abuse incidents that they experienced as infants or toddlers and have been told about, and so the consideration of narrative memory development is less critical in clinical interviews. Children should not be asked questions about concepts, such as time, of which they have not developed an understanding. As younger children often have difficulty viewing events from the perspectives of others, clinicians should not ask children to make inferences about the intentions, thoughts, and feelings of others without first determining that the child has developed the ability to do so.

19.8 Information Critical to Make a Diagnosis

Formation of a psychiatric diagnosis is not the purpose, nor should it be a concern, of the forensic interviewer. Chapter 18 (Phillips & Gross, this book) provides guidelines on critical information to be gathered in clinical interviews to form psychiatric diagnoses with children. With maltreatment, the child has been referred because he or she has experienced a stressful life event (i.e., the abuse), and so the scope of the interview is not limited to diagnosis. As discussed earlier, resiliency is common following abuse, and the diagnostic interviewer will sometimes work with children who display few or no psychiatric symptoms (Saywitz et al., 2000). Asymptomatic children pose a challenge for clinicians, as little research is available to guide decision-making on treatment for this group (Sawyer & Hansen, 2009). Treatment services generally recommended for asymptomatic children include psychoeducational interventions designed to prevent further victimization, clarify and normalize negative abuse-related cognitions, and educate parents (Putnam, 2003). Interviews should also include assessment of abuse characteristics known to be risk factors for psychopathology (e.g., use of violence, duration of the abuse) because asymptomatic children may be at greater risk for deterioration or later emergence of symptoms in the presence of those factors. When such risks are elevated, psychoeducational interventions should be followed by reevaluation and monitoring of functioning (Saywitz et al.).

19.9 Dos and Don'ts

Do approach forensic interviews objectively without assumptions about the truthfulness of abuse allegations. For clinical interviews, develop sensitivity to the heterogeneity of symptom presentation and the resilience of children who have been sexually and/or physically abused. Do appreciate the family context and the role of parents, other caregivers, and siblings. Do gather information from a variety of sources, evaluate the safety of the child's living environment, and recognize the role of culture and development.

Don't use leading questions or separate interviews for law enforcement, child welfare, and medical professionals in forensic situations. Clinicians should not ask children to talk about abuse before they have learned appropriate coping skills in a therapeutic setting. Don't assume that children who have been abused will have exclusively negative emotions for the perpetrator or that their perceptions of the child protective system will be exclusively positive.

19.10 Summary

Forensic and diagnostic/clinical interviewing represent two separate functions that mental health practitioners perform for children following allegations of abuse. Forensic interviews require a high level of objectivity and do not lead to psychiatric diagnoses or therapeutic alliance as is typical in therapeutic settings. The child advocacy center model provides a safe, child-friendly environment that has been shown to improve service coordination and lead to more positive legal outcomes than traditional methods of investigation. Strategies such as allegation blind interviewing, open-ended questioning, cognitive interview techniques, truth–lie discussions, and anatomically detailed dolls have been shown to enhance the accuracy and usefulness of information gathered during forensic interviews under certain conditions. Structured formats, such as the NICHD protocol, have demonstrated effectiveness, but only when used by highly trained interviewers. Maltreated children present for mental health services with a wide range of problems, and some resilient children are asymptomatic. Clinical interviewers rely on broad assessments of child functioning and family context to generate psychiatric diagnoses, assess emotional and behavioral sequelae of abuse, identify maladaptive abuse-related cognitions, evaluate family support, and formulate treatment plans. Children's developmental levels and their cultural backgrounds are important considerations for both forensic and clinical interviews.

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Chapter 20
Older Adults

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20.1 Introduction

20.2 Description of the Population

In 2006 there were 37.3 million older adults (65+) in the USA, which represents an increase of 3.4 million over a period of 10 years (Administration on Aging, 2009). Approximately 12.4% of the population is 65 years of age or older. Older adults are also living longer, with 5.3 million older adults who are 85 years of age and older. Approximately 19% of older adults in 2006 were members of minority groups, with the greatest percentage (8.3%) being African American, followed by persons of Hispanic origin (6.4%) and Asian or Pacific Islanders (3.1%) (Administration on Aging, 2009). Approximately 1.62 million (1.4%) of older adults were living in nursing homes in 2006, with the greatest percentage in the age range of 75–84 years (15.4%; Administration on Aging, 2009).

Approximately 20–25% of older adults have a mental disorder, but less than 25% of those receive mental health attention (Administration on Aging, 2009). This may be due in part to the fact that older adults most likely seek help for mental health problems from primary care physicians, and many primary care physicians have failed to adequately assess for mental health problems (cf., Scogin & Shah, 2006). Such assessment is critical and must be followed by adequate treatment or referral and follow-up.

The prevalence, nature, and course of mental disorders can be quite different from that of younger adults. These age-related differences can substantially affect the assessment and diagnosis process and outcome. The purpose of this chapter is to offer the reader a concise discussion of diagnostic assessment issues that are important to consider when undertaking the interview assessment of older adults.

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We begin with procedures for gathering information, with an emphasis on multimethod assessment. A case study illustrating some of the complexity of differential diagnoses with older adults follows. We then move to a discussion of structured interviews with an eye to instruments used with or developed for older adults. A relatively detailed discussion of age-relevant factors to consider when entertaining diagnoses for older adults is then offered, followed by some very practical Dos and Don'ts in the context of age-related changes one must anticipate and consider in the conduct of diagnostic assessment.

20.3 Procedures for Gathering Information

20.3.1 Multimethod Assessment: Minimizing Threats to Validity

Each assessment method can provide relatively unique information about a client. Campbell and Fiske (1959) addressed the relative uniqueness of information obtained across assessment methods in their classic article on the multitrait, multimethod approach to the examination of construct validity. Lang (1968), in his study of anxiety and fear, offered support for this notion by finding asynchrony or partial independence among multiple measures of anxiety (e.g., overt motor behaviors, physiological responses, verbal report of cognitions). Even, as one might expect, the use of multiple reports by peers, clinicians, and individuals close to the target person can yield only moderate associations among measures of the same phenomena (Meyer et al., 2001). Each assessment method has its strengths and weaknesses and can provide somewhat independent information. Though the focus of this book is interviewing, which is a single method, we will briefly discuss multiple methods of assessment for arriving at valid diagnoses because noninterview methods can provide unique information that can complement that obtained with the interview and that may be missed through the interview method. For example, older adults, as a function of cohort and cultural background, may minimize or deny symptoms (Blazer, 2009; Wong & Baden, 2001). We encourage clinicians to supplement information gathered through older adult self-report with information from other sources (i.e., multimethod assessment) and avoid mono-method bias (Cook & Campbell, 1979). Thus, in addition to the clinical interview, additional procedures for gathering information will be discussed, including behavioral observation, interviewing informants, and a review of medical records.

20.3.2 Clinical Interview

The unstructured clinical interview is a very important element of the diagnostic process and frequently the only assessment method used for the rendering of a diagnosis.

It is also the first step in a process that can lead to a therapeutic alliance and ultimately to treatment. The establishment of rapport is essential for the current cohort of older adults prior to disclosure of sensitive information about the client's emotions and mental health (Edelstein, Koven, Spira, & Shreve-Neiger, 2003a). Establishing rapport may be most important for older adults in earlier birth cohorts (e.g., prior to World War II) because extroversion was found to be lower among these earlier cohorts (Schaie, 1995).

During the interview, the clinician seeks information about a client's relevant history, current and past stressors, and presenting symptoms. When reviewing the client's presenting concerns, it is essential to consider the context of the symptom presentation (Blazer, 2004). A clinician should inquire as to when the symptoms began occurring, how long they have lasted, and in what environmental context they occur. The clinician may ask the client to bring copies of medical records or a list of the medications that the client is currently taking to ensure accuracy of information and supplement information obtained in the interview.

When establishing rapport with an older client, the clinician should begin with less sensitive questions. As trust and rapport are established as the interview progresses, a clinician may then want to probe at more sensitive topics and increase the depth of questioning. Familiarity with the social contexts of older adults, particularly the environments in which they live (e.g., age-segregated housing) and in which older adults may seek out services or recreation opportunities (e.g., senior centers and recreational centers) can help the interviewer obtain information (Satre, Knight, & David, 2006).

Information obtained during the clinical interview can be supplemented with information provided by other informants. Interviews can be conducted with both the client and an informant, such as a spouse, sibling, friend, or an adult child. In these informant interviews, information that the older client may be reluctant to discuss may be obtained, including information about sexual issues, urinary incontinence, and behavioral disturbances (Edelstein et al., 2003a). Other important information to obtain from other informants is the history of symptoms (onset, duration, change in symptoms over time), past history of medical and psychiatric disorders, and family history of depression, alcohol abuse/dependence, psychoses, and suicide (Blazer, 2004). Additionally, dyadic interviewing can be used with intact married couples or partners if relationship problems are part of the presenting issue. Further, involving a spouse or other individual during assessment may help in the future implementation of behavioral interventions with the older adult client.

20.3.3 Structured Interviews

Alternatives to an unstructured clinical interview are structured and semistructured diagnostic interviews. Structured interviews enable more standard evaluation through the use of specific language in questions, predetermined sequencing of the questions, and quantification of the individual's responses (Rogers, 2001).

Some health maintenance organizations and other health insurance companies may require the use of structured interviews, as they have been demonstrated to be reliable and valid methods of assessment. Additionally, structured interviews decrease variability between interviewers and ensure that all diagnostic criteria are addressed in a systematic manner, thus increasing the reliability and validity of a diagnosis (Segal, Coolidge, O'Riley, & Heinz, 2006). Using structured interviews with older adults has two main disadvantages that are of particular importance for interviewers to consider. First, administration of structured interviews may limit the establishment of rapport. Second, the validity of structured interviews is limited by the validity of the diagnostic criteria themselves, which will be discussed at a later point in this chapter. Semistructured interviews utilize both structured and unstructured questions that are formulated by the examiner to obtain more information and assist in the rating of responses (Rogers, 2001). As an interviewer assessing older adults, it is important to consider the reliability and validity of the structured and semistructured interviews in identifying psychological disorders in older adults, as such evidence may be lacking for interviews that were developed with younger adults.

A review of available structured interviews is beyond the scope of this chapter. Instead, a summary of several representative interviews will be presented. The Structured Clinical Interview for the DSM-IV (SCID-I) is a semistructured interview designed to be used by a trained interviewer to assist in determining a DSM-IV Axis I diagnosis (First, Gibbon, Spitzer, & Williams, 1996). There are different versions of the SCID that exist for research and clinical uses. The research versions assess a greater variety of diagnoses and take longer to complete in comparison with the clinical version, the SCID-CV, which focuses on the most common diagnoses encountered. One limitation of the SCID-CV is that it does not cover cognitive disorders, which are more likely to affect older adults. There are versions available for use with adult psychiatric patients (SCID-P) and nonpatients (SCID-NP) as well. In a combined sample of inpatient and outpatient older adults, the following interrater reliabilities were obtained for the SCID: 91% for all diagnoses, 85% for major depression, 94% for anxiety disorders, and 100% for somatoform disorders (Segal, Hersen, Van Hasselt, Kabacoff, & Roth, 1993).

The Anxiety Disorders Interview Schedule (ADIS-IV; Brown, DiNardo, & Barlow, 1994) is a semistructured interview that includes multiple scales of anxiety (including fear of aging) as well as assessment of mood disorders and substance abuse. No psychometric data specifically from older adults are available, but the instrument has been used with this population and was recommended for use in a recent review of assessment instruments for older adults (Edelstein et al., 2008).

The NIMH Diagnostic Interview Schedule (DIS; Robins, Helzer, Croughan, & Radcliff, 1981) is a structured interview that can be administered by lay interviewers after brief training (1–2 weeks; Blanchard & Brown, 1998). The DIS utilizes a computer program to generate a diagnosis. Eaton, Neufeld, Chen, and Cai (2000) found that older age was associated with underdetection of depression using the DIS.

Other studies have examined the DIS in relation to detection of depression in older adults and have made modifications to the interview to record information regarding the interviewee's current mental status (VonKorff & Anthony, 1982). Blazer (2004) indicated that the DIS takes about 45–90 min to administer with an older adult and is often used in clinical studies because of its brevity and ease of use. In sum, the DIS is a useful instrument in epidemiological or clinical studies, but low reliability with clinical interviews and a highly structured format may hinder its use in clinical settings when other semistructured interviews are available (Blanchard & Brown, 1998). Both the DIS and the SCID have long questions encompassing multiple ideas, which may be problematic for some older adults (Mroczek, Hurt, & Berman, 1999).

Symptom presentation of personality disorders may change later in life as the individual's environment changes over time (Mroczek et al., 1999). Edelstein and colleagues reviewed the use of five semistructured interviews for personality disorders with older adults. All the reviewed semistructured interviews for personality disorders have been used with older adults in research studies, but limited psychometric data are available for older populations. The recommended semistructured interviews were Structured Clinical Interview for DSM-IV Axis II Personality Disorders (First, Gibbon, Spitzer, Williams, & Benjamin, 1997), Structured Interview for DSM-IV Personality (Pfohl, Blum, & Zimmerman, 1997), International Personality Disorder Examination (Loranger, 1999), Personality Disorder Interview-IV (Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995), and the Diagnostic Interview for DSM-IV Personality Disorders (Zanarini, Frankenburg, Sickel, & Yong, 1996).

The Geriatric Mental State Schedule (GMS; Copeland et al., 1976) is a semistructured interview that is utilized to examine the mental state of older adults. The GMS is also available as a computer-assisted interview (GMS-AGECAT) and has been validated for use in multiple languages. The GMS Schedule-Depression Scale (Ravindran, Welburn, & Copeland, 1994) comprises items from the GMS, which were selected to differentiate between depressed and nondepressed older adults.

The Comprehensive Assessment and Referral Evaluation (CARE; Gurland et al., 1977) is a semistructured interview that takes about 1–2 h to administer and score, but requires extensive training in administration. The focus of the CARE is on assessing cognitive, psychiatric, and physical health as well as social status. A shorter version of the instrument is also available for use with older adults (short-CARE; Gurland, Foldon, Teresi, & Challop, 1984).

A detailed assessment instrument that incorporates multiple elements to diagnose dementia is the Cambridge Mental Disorders of the Elderly Examination (CAMDEX; Roth et al., 1986). The CAMDEX includes diagnostic interviews, collateral interviews, medical procedures, and a structured interview for cognitive impairment, the CAMCOG. The CAMCOG is effective in differentiating dementia from depression with 92% sensitivity and 96% sensitivity (Hendrie et al., 1988). Interrater reliability ranges from 0.50 to 1.0 with the reliability coefficient on most items (78.3%) exceeding 0.75 (Hendrie et al.).

20.3.4 Mental Status Examination

The mental status examination is a method of psychiatric assessment that is commonly used to establish psychiatric diagnoses. It is the principal psychiatric assessment method of physicians and is often used by psychologists, particularly those working in medical settings. Though the format of the examination may vary, it typically includes a description of general appearance, overt behavior, relationship with the therapist, mood, suicidal and homicidal ideation, affect, perception (e.g., hallucinations or illusions), cognitive functioning (e.g., intellectual functioning, orientation, memory, attention, concentration), delusions, judgment, insight, and reliability (Groth-Marnat, 2003).

All elements of the mental status examination are of potential importance, but a few of them are of particular importance when interviewing older adults. For example, inquiry about suicidal ideation is particularly important because older adults are at the greatest risk of suicide (Centers for Disease Control, 2005). Risk factors include current mood disorders, psychiatric hospital admission within the previous year, and limited social network (Beautrais, 2002). Studies have shown that perceived health status and sleep quality also predicts suicide in late life (Turvey et al., 2002). Certain specific physical conditions, including seizure disorder, urinary incontinence, chronic obstructive lung disease, and moderate or severe pain, are associated with increased suicide risk (Juurlink, Herrmann, Szalai, Kopp, & Redelmeier, 2004). Further, the vast majority of people who complete suicide meet criteria for at least one other DSM-IV Axis I disorder (Waern et al., 2002). Major depression is the most common comorbid disorder, but substance use, minor depression, dysthymia, and anxiety disorders are associated with increased risk as well (Waern et al.). It is important to consider these factors when assessing suicide risk. According to Brown et al. (2001), therapists should assess suicide ideation, levels of depression, levels of hopelessness, reasons for living, the person's access to lethal means, levels of impulse control, treatment compliance, social support, whether there is a history of suicide attempts, alcohol or drug use, psychosis or mania, and whether the client is dealing with a significant current life stressor to determine suicide risk. There are a variety of measures available for assessing for suicide risk (Nock, Wedig, Bellejanis, & Deliberto, 2008), although only two have been developed specifically for older adults (Edelstein et al., 2008).

The other major domain of particular importance for older adults is cognitive functioning, which often diminishes with age. Older adults are also more likely to experience dementia. When cognitive impairment is suspected based on preliminary assessment through the mental status examination, a cognitive screening instrument can be used for additional assessment. Though the Mini Mental State Examination (Folstein, Folstein, & McHugh, 1975) is the most popular screening instrument, newer instruments (e.g., Montreal Cognitive Assessment; Naserredine et al., 2005; Zadikoff et al., 2008) may be less subject to ceiling effects and more sensitive in identifying mild cognitive impairment. The results of the screening can be used to determine whether more in-depth assessment is appropriate or to direct client care (Groth-Marnat, 2003).

20.3.5 Functional Assessment

Functional assessment is a behavior analytic approach to the determination of variables controlling a behavior of interest. It is an idiographic approach to assessment that is individualized and involves methods and measures that are tailored to the individual client. The focus of the analysis is most often the antecedents and consequences of the presenting problem behavior, as both of these variables can influence the frequency, intensity, and duration of a behavior. A functional assessment can be conducted in the context of an interview of an individual or someone else who has the opportunity to observe the target behavior of the individual in question under the conditions that are likely to produce or maintain the behavior. A thorough functional assessment should reveal conditions (antecedents) that will reliably set the occasion for the behavior and the consequences that will strengthen or weaken the behavior. For example, an older client who is reportedly socially withdrawn might be interviewed to establish the conditions under which he or she is most likely to be socially withdrawn. These conditions could include features of the external environment (e.g., social gathering) and the private events or cognitions of the client that precede the social gathering (e.g., "I am very uncomfortable; I am worried about what they will think about me," "My heart is racing and my mouth is dry"). The consequences of the social withdrawal would also be explored. The withdrawal might function as an avoidance response that is reinforced by the avoidance or reduction of the anxiety symptoms. It is also possible that the withdrawal occurs following initial social interactions. Thus, the withdrawal could function as an escape response that is reinforced by the reduction in anxiety. This functional approach is not diagnostic, although it can point to symptoms that collectively yield a diagnosis (e.g., social phobia in this example). Most important, it can guide treatment planning and evaluation.

20.3.6 Behavioral Observations

Behavioral observations are obtained through direct observation of client's behavior during the interview, mental status exam, interactions with informants, and during completion of self-report measures. These observations provide important diagnostic information that may not be obtained elsewhere. For example, if an individual is performing poorly on a cognitive task that requires more effort (e.g., serial subtraction), but performs well on less effortful tasks (e.g., confrontational naming), this observation may help in differentiating depression from dementia in older adult clients. During the interview, information about language including fluency, word finding skills, and receptive listening skills can be obtained to inform diagnoses. Language abilities are more directly tested during the mental status exam. With behavioral observations, the interviewer can focus on distress during the mental status exam and can use behavioral observation as well as the results of the exam to determine the contribution that prior education may have on current mental status. That is, is a person visibly distressed during the examination (e.g., sighing, fidgeting). Motor skills can be observed during the mental status exam and during completion of paper-and-pencil measures. During these tasks, hand tremors, grip on a pencil, fluidity of movements during aspects of mental status testing, and other involuntary movements that may be emitted throughout the interview can be observed. Additionally, while the client is ambulating from the waiting area to the interview, gait and posture can be observed. Observations about clothing and appearance may provide additional information about the client's functioning, particularly, one's ability to complete activities of daily living. If the client is dressed in clothing that is not appropriate for the weather and season, this may provide information about the client's ability to complete activities of daily living independently, decision-making, or possibly underlying medical conditions. During the mental status exam and interview, it is important to observe the client's affect. When older adults are depressed, they are less likely to present with dysphoria compared to younger adults (for a review, see Fiske & O'Riley, 2008). However, information about hopelessness, fatigue, and anhedonia may be obtained from behavioral observations. Additionally, anxiety may be observed during testing or during the interview. The identification of antecedents for anxiety or other negative affective states may help in treating and reducing the frequency of problematic behaviors (e.g., avoidance, agitation). In sum, behavioral observations are an essential part of diagnostic interviewing, and are increasingly important as individuals with cognitive impairment may not be accurate reporters of some information.

20.3.7 Review of Records

20.3.7.1 Psychosocial History

A review of older adults' psychological and medical records can provide information valuable to the diagnostic process. The client's educational history may enable the clinician to place the client's current level of cognitive functioning in perspective. In a similar vein, psychosocial histories can be particularly useful in determining whether the client's current functional status and symptom picture represents a change from previous levels of functioning. Information previously provided by familiar members regarding the functioning of the client's family and the problem(s) of the client in the family context can be helpful in understanding the client's current functioning. Information regarding prior episodes of the presenting disorder or other mental disorders is important, particularly when the information is obtained from family members or significant others who may have had a different perspective on the prior episodes. Because criteria for several disorders require that the symptoms noted represent a change (e.g., in functional status, mood, cognitive functioning), such information can be useful in the diagnostic process (American Psychiatric Association, 1994). In addition, the records can reveal whether the individual has exhibited or experienced the present symptoms for a period sufficient to warrant a particular diagnosis (e.g., symptoms of schizophrenia for more than 6 months). Furthermore, prior reports can assist in differential diagnosis. For example, clients with longstanding symptoms of schizophrenia may also have a history of concurrent mood disturbances that they are unable to report due to cognitive impairment (Edelstein et al., 2003a). A review of medical records might yield evidence of these episodes that would support a diagnosis of schizoaffective disorder, rather than schizophrenia. Another advantage of reviewing records is that when interviewing older adults, it is not uncommon for older adults to view previously experienced disorders or trauma as being irrelevant to the current presenting problem, and fail to report such information (Blazer, 2009). Finally, one must be circumspect when considering previous records of symptoms, behaviors, and diagnoses because one cannot always depend upon reliable and valid reporting by other clinicians. Individuals can carry diagnoses that were given decades ago without documentation that would support the diagnosis.

20.3.7.2 Consideration of Medical History

In 1990, approximately 10% of older adults reported that they were in poor health (Administration on Aging, 2009). African Americans were almost twice as likely to report poor health as Euro-Americans (Administration on Aging, 2009). As older adults age, there is an increasing likelihood of them reporting fair or poor health (Administration on Aging, 2009). Consideration of medical history and current medical symptoms and disorders is very important when assessing older adults.

Assessment of physical functioning typically includes laboratory tests (e.g., thyroid function, blood glucose, folic acid, lipids) and a physical examination that is informed by knowledge of age-related physical and cognitive changes. The many potential factors contributing to the presenting problem(s) must be carefully considered. In most instances, one must first rule out any potential medical cause of the presenting psychological symptoms. In some cases, presenting psychological symptoms (e.g., depression, anxiety) are the result of, or concomitants of, physical diseases. Hypothyroidism, for example, can present as depression and even precede the diagnosis of hypothyroidism (Fountoulakis, Iacovides, Grammaticos, St. Kaprinis, & Bech, 2004). A review of an individual's medical history can help determine whether a constellation of symptoms are due to a psychological diagnosis, a preexisting medical condition, or a combination of medical and psychological disorders (Edelstein et al., 2003b).

20.3.7.3 Consideration of Laboratory Test Results

Laboratory tests can offer considerable convergent information that is helpful in reaching an accurate diagnosis and can be used to rule out medical causes of presenting symptoms or assist in making differential diagnoses. For example, the results of an MRI could be used to determine whether cognitive deficits are best accounted for by cerebral atrophy related to a brain disease (e.g., Alzheimer's disease, multi-infarct dementia), a depressive disorder, or a combination of the two (Blazer, 1996; Riley, 1994). Thyroid function tests, for example, thyroid-stimulating hormone (TSH), thyroxine (T4), and triiodothyronine (T3), can offer evidence to support a diagnosis of hypothyroidism that is presenting with symptoms of depression. Tests of vitamin B_{12} and folate can assist in determining whether cognitive impairment, depression, or psychosis is best explained by deficiencies of these vitamins (Thakur & Doraiswamy, 2009). Though such deficiencies can be seen in younger adults, older adults may be more likely than younger adults to exhibit some of these deficiencies (e.g., B_{12}; Stabler, Lindenbaum, & Allen, 1997).

Finally, one should not assume that because an individual is being treated for a physical disorder that could present with psychiatric symptoms the disorder is being adequately managed. Such a mistake can lead one down a trail of diagnostic inaccuracies and inappropriate interventions.

20.4 Case Illustration

One of the more commonly asked assessment questions encountered by interviewers who assess older adult clients is whether a client is suffering from depression, dementia, or both. The following case, adapted from the previous edition of this book (Edelstein et al., 2003a), illustrates the challenges of arriving at a differential diagnosis when faced with this diagnostic question. Lynn is an 83-year-old Caucasian woman who has resided in a nursing home for several months following injuries suffered in a fall. You are seeing her at the request of the Director of Nursing, who is concerned about changes in Lynn's behavior over the past few weeks. Lynn is accompanied by her daughter, Natalie. Natalie is concerned that Lynn appears apathetic at times and no longer attends social activities. When Natalie tries to engage her mother in activities during their visits, Lynn appears less interested in the activities that she used to enjoy. Lynn complains of difficulties with concentration and memory and has experienced difficulty in remembering the subject of conversations. She is also disoriented at times and becomes frustrated and angry when this occurs. Last night, Lynn walked into the bedroom of a male patient and climbed into his bed. When the patient explained to Lynn that she was in the wrong room and tried to move her, Lynn struggled with him and then began crying. Natalie reports that Lynn seems unhappy and withdrawn most of the time. Natalie explains that she has never seen Lynn like this before.

You peruse Lynn's chart and find that she has a family history of Alzheimer's disease, but she has no known history of mental illness. She has not had any recent changes in her medication. She has lost eight pounds in the past 3 weeks, putting her just under her ideal weight range. After speaking with staff, you learn that 4 weeks ago, Lynn was given a new roommate after her roommate of 9 months died. Lynn's new roommate is bedridden and noncommunicative. Lynn's daughter tells you that she has not been able to visit as often because she is going through a custody battle with her ex-husband. She further reports that each time she has visited in recent weeks, she has noticed a decline in Lynn's cognitive abilities and a change in Lynn's affect and mood.

When you interview Lynn, you notice that her gait is slow and unsteady. She is still wearing her bedclothes and her hair is uncombed at 3 PM. She has forgotten her glasses. She seems to hesitate and look around the room between steps. As you interview her, she is polite but tearful. She reports that she is not interested in activities that she formerly enjoyed, she sleeps much more often, her appetite is almost nonexistent, and she worries constantly about her daughter and grandchildren. Her memory and concentration are markedly impaired, a source of great distress for her, and she reports feeling worthless and unhappy. Lynn frequently needs to be prompted to complete sentences because her sentences trail off as she stares out through the window. She asks you to repeat questions several times because she reports having forgotten the question. In light of Lynn's symptoms (e.g., memory and concentration deficits and reports of depressed mood) you are uncertain whether Lynn is experiencing depression or dementia.

You interview nursing staff about Lynn's behavior at various times during the day and find that she leaves her room only for meals, has difficulty finding her room when she returns, and becomes agitated and tearful when trying to locate her room. When other residents approach her, she either complains or does not respond at all; they quickly leave her alone.

You orally administer a self-report measure of depression (Geriatric Depression Scale; GDS; Yesavage et al., 1983). Lynn endorses 12 out of 15 items on the brief version of the GDS. The GDS is chosen rather than a lengthy, time-consuming, structured interview because of Lynn's apparent depression and cognitive deficits. Then, you interview Lynn to assess her grief and bereavement following the death of her roommate 9 months prior. Lynn reports being sad about her roommate's death, but it does not appear to be accounting for her other symptoms of depression. During this interview, Lynn makes several statements suggesting that she is feeling hopeless. After assessing suicide, you find out that Lynn feels that she is a burden on her daughter, but Lynn is not contemplating suicide and does not have a plan.

You then assess her memory using a few simple working, primary and secondary memory tasks to evaluate the extent of her cognitive impairment. When you assess Lynn's memory using the Hopkins Verbal Learning Test (HVLT-Revised; Shapiro, Benedict, Schretlen, & Brandt, 1999), you find that her performance is inconsistent, sometimes within normal limits, other times far below. Although she cries throughout the interview process and reports feeling frustrated and worthless, you find that Lynn's memory is not as bad as she reports it to be. When you tell this to Lynn, she shakes her head and tells you that the reason she has done well on some of the memory items is that the tasks were easy. Lynn performs well on simple tests of short-term memory (e.g., recalling a series of numbers), but performs poorly on tests that require greater concentration and working memory (e.g., digits backward). To further assess for possible dementia, the Boston Naming Test (Goodglass & Kaplan, 1983), a test of language and word finding ability, is administered.

Lynn performs within normal limits. On follow-up tests, her rate of forgetting is within normal limits. In light of Lynn's high score on the GDS (she endorsed out of 15 depression items), specific questions regarding possible depression are asked to flesh out the clinical impression yielded by the GDS and to determine whether Lynn meets DSM-IV criteria for a mood disorder.

Based upon Lynn's reports, her performance, your observations, and reports from staff and family, you conclude that Lynn is probably experiencing a major depressive episode. This conclusion is based on Lynn's rate of decline (moderately rapid; more rapid might have suggested a stroke), complaints of deficits (abundant), emotional reaction to deficits (marked distress), evaluation of accomplishments (minimized), and poor performance on memory tasks requiring concentration, but not simpler memory tasks. These symptoms are all indicators of depression. Had Lynn been experiencing dementia, the rate of decline would have been slower and her complaints about her decline, as well as her emotional reaction to them, would probably have been inconsistent (sometimes complaining, other times not reporting any distress related to her decline). A stroke or transient ischemic attack probably would have produced a more rapid decline in cognitive functioning. It is possible that Lynn's recent experiences (new roommate, concern for daughter) may have resulted in depression that impacts concentration abilities, mood, and memory.

20.5 Impact of Race, Culture, Diversity, and Age

Older adults are a diverse group, spanning a broad age range from recent retirees to centenarians, varying cultural backgrounds, levels of education, and ethnic groups. It is important for the clinician to seek training in cultural competency, which can include acquiring knowledge of the prevalence, incidence, and risk factors for mental disorders among older adult ethnic groups, and cultural differences in presentation of psychopathology. The experiences associated with different cultural contexts will shape behaviors, beliefs and expectations (e.g., caregiving responsibilities), and symptom presentation. A client's racial or cultural identity may have shaped their behaviors in caregiving (Dilworth-Anderson et al., 2005) and adjustment to the loss of a spouse (e.g., Carr, 2004).

Other factors to consider include acculturation, living environment, and education. Lower acculturation may be related to greater cultural barriers and increased stressors. For example, González, Haan, and Hinton (2001) found that the prevalence of depression was greatest for less-acculturated older Mexican Americans compared with that for US-born Mexican American older adults. Another aspect to consider is whether the individual resides in an urban, suburban, or rural area. Older adults residing in urban areas may have very different beliefs, experiences, and current access to services compared with older adults in rural areas. Earlier cohorts of older adults may have obtained less education than later cohorts. The level of education obtained is very important to consider because it may impact assessment results and information obtained during the interview and mental status exam.

In sum, there are multiple variables that may influence a client's presentation during the interview. A thorough functional analysis of the physical and cultural contexts of the symptoms can help the interviewer arrive at an accurate diagnosis (Hayes & Toarmino, 1995).

20.6 Information Critical to Make a Diagnosis

20.6.1 Consideration of Medical Conditions

Numerous medical conditions are comorbid with psychiatric disorders, exhibit psychiatric manifestations, or produce psychiatric symptoms in reaction to the disorders. Consequently, the potential role of medical disease in the presenting psychiatric symptoms of clients should always be considered, particularly with older adults who are more likely to be experiencing medical disorders. One example of a physical disorder with psychiatric manifestations is chronic obstructive pulmonary disorder (COPD). COPD patients are 2.5 times as likely as patients without the disorder to experience depression (Van Manen et al., 2002). Prevalence estimates of comorbid anxiety range from 2% to over 50% (Mikkelsen, Middelboe, Piosinger, & Stage, 2004). Parkinson's disease is often comorbid with depression (Henderson, Kurlan, Kersun, & Como, 1992) occurring in approximately 41% of people with Parkinson's disease (Rodin, Craven, & Litttlefield, 1993). The diagnosis of depression also can precede symptoms of Parkinson's disease (Taylor, Saint-Cyr Lang, & Kenny, 1986).

A wide range of medical conditions (e.g., endocrine disorders, infectious disorders, cardiac disorders, metabolic disorders) can result in behaviors that can be mistaken for psychiatric disorders. The most notable of these is delirium, which can result from insufficiency of any organ system (Inouye, 1998) or, quite commonly, from systemic infections (e.g., urinary tract infection). It is not uncommon for older adults with urinary tract infections to exhibit "personality changes" that remit once the infection is eliminated. Congestive heart failure can present as delirium in older adults even though the common symptoms of chest pain or dyspnea found in younger adults are absent (Inouye, 1998). The results of a recent physical examination can be invaluable in sorting out the etiologies of the presenting problem(s).

20.6.2 Consideration of Medication Effects

Older adults consume 34% of all the prescription medications, 30% of all over-the-counter medications, and constitute only 12% of the US population (Center for Disease Control, 2004). Older adults take an average of two to five medications, and 20% to 40% of older adults take five or more medications (McLean & LeCouteur, 2004). Older adults are at greater risk than younger adults for experiencing adverse effects of medications, due in part to age-related changes in drug pharmacokinetics (rate of absorption, distribution, metabolism, and excretion) and pharmacodynamics (physiological and biochemical effects on the body). The potential adverse effects of medications, interactions among medications, and the resulting adverse effects of these interactions can contribute substantial complexity to the diagnostic process. To further complicate the picture, older adults are more likely than younger adults to take more medications than are needed (termed polypharmacy; Hajjar & Hanlon, 2006).

Another complicating factor is that medications can produce adverse effects that present as psychiatric symptoms. For example, levodopa and carbidopa, which are used to treat Parkinson's disease, can result in confusion, hallucinations, and nightmares. Theophylline, a drug bronchodilator used to treat COPD, can cause symptoms of anxiety and insomnia (Casas, Ramos-Quiroga, Prat, & Qureshi, 2004). Side effects of the popular SSRIs used to treat depression and anxiety can include anxiety, agitation, and insomnia (Ferguson, 2001). It behooves one to carefully consider all of the medications being taken by an older client and explore the possibility that the presenting psychiatric symptoms are due in part or entirely to the adverse effects of the medications.

20.6.3 Interaction of Cognitive Impairment and Mental Disorder

It is important to consider the complex interactions between cognitive impairment and other mental disorders when making a diagnosis. These interactions present unique diagnostic challenges for clinicians assessing older adults. For example, depression is common among those diagnosed with mild cognitive impairment (Garbryelewicz et al., 2004). However, it can be difficult to differentiate between cognitive impairment associated with depression and independent symptoms of cognitive decline. Symptoms of depression (e.g., apathy, loss of energy, trouble concentrating) can lead to poorer performance on tests of cognitive skills, which could incorrectly lead one to a diagnosis of dementia. The notion that the subjective experience of cognitive decline, or the stress of receiving a diagnosis of dementia, could trigger a depressive episode may seem intuitive, but the comorbidity and interplay of these disorders is not always apparent in clinical practice.

The direction of the relation between cognitive impairment and depression is unclear. Depression in older adults is associated with executive dysfunction, episodic memory impairments, and impairment in visuospatial ability (Elderkin-Thompson, Mintz, Haroon, Lavretsky, & Kumar, 2007; Nebes et al., 2000). Some of these symptoms may improve once the depressive symptoms have been treated (Butters et al., 2000). However, even if symptoms of cognitive impairment improve or remit, those who experienced symptoms of cognitive impairment during a depressive episode are more likely to develop dementia in the future (Alexopoulos, Meyers, Young, Mattis, & Kakuma, 1993). It is unclear whether the etiology of the symptoms of cognitive impairment is depression or underlying early stage dementia.

Similar challenges exist for symptoms of anxiety and cognitive impairment. High levels of anxiety have been associated with poorer cognitive performance (Bierman, Comijs, Rijmen, Jonker, & Beekman, 2008; Wetherell, Reynolds, Gatz, & Pedersen, 2002). Specifically, high levels of anxiety are associated with poorer performance on tests of memory and attention (Derouesne, Rapin, & Lacomblez, 2004) and on set shifting tasks (Mantella et al., 2007). More severe anxiety is associated with impaired executive functioning, delayed verbal memory, and information processing speed (Booth, Schinka, Brown, Mortimer, & Borenstein, 2006; Rozzini et al., 2009).

Symptoms of anxiety are common among older adults with mild cognitive impairment and dementia, and they are associated with worse behavioral and cognitive outcomes for those with Alzheimer's disease (Beaudreau & O'Hara, 2008). However, there is conflicting evidence as to whether deficits associated with anxiety can predict future cognitive impairment (Bierman et al., 2008; Sinoff & Werner, 2003).

20.6.4 Classification Issues

There are several challenges to consider when screening and diagnosing older adults. Many tools used for screening and diagnosis were developed for use with younger adults (*see* Edelstein et al., 2008), and often have unestablished psychometric properties with older adults. Older adults experience and present symptoms of various disorders that differ from those of younger adults. Thus, it is important to consider whether our current diagnostic criteria for mental disorders adequately capture the presentations and experiences of mental disorders among older adults. Further, many older adults present with subsyndromal, but clinically significant, levels of symptoms. Finally, physical and psychiatric comorbidities can further complicate diagnosis among older adults. Below, we discuss the implications of these challenges when assessing for depression and anxiety in older adults.

Clinicians working with older adults should be aware of the unique presentations of mental disorders in older adults, as one can miss symptoms and disorders that are more or less common among older than younger adults. Many studies have examined screening for depression in primary care, where older adults are more likely to first present for treatment (Harman, Crystal, Walkup, & Olfson, 2003; Scogin & Shah, 2006). As previously noted, many primary care physicians fail to adequately assess for mental health problems (Scogin & Shah, 2006). Physicians are more likely to recognize depression if the person mentions feeling sad, depressed, or irritable (Bowers, Jorm, Henderson, & Harris, 1990), or if a person had seen a psychiatrist, did not carry a diagnosis of dementia, had multiple symptoms of depression, and reported physical pain (O'Connor, Rosewarne, & Bruce, 2001). However, older adults with depression are less likely to report dysphoria or anhedonia than younger adults (Gallo, Anthony, & Muthen, 1994). The aforementioned studies found that patient's report of feeling depressed improved diagnosis in primary care, illustrating the importance of recognizing age differences, as the nature of depression may differ in late life (Fiske & O'Riley, 2008). Older adults are also less likely to report ideational symptoms (e.g., guilt) than younger adults (Fiske, Kasl-Godley, & Gatz, 1998) and are more likely to report somatic symptoms (Christensen et al., 1999). Further, older adults are more likely to report early morning wakening and psychomotor retardation than younger adults (Christensen et al.).

As with depressive disorders, anxiety disorders present differently in older adults. Though it has traditionally been thought that the prevalence of anxiety decreases with age (Blazer, Service, George, & Burchett, 1991; Flint, 1994), it is possible that the current diagnostic criteria simply do not adequately capture the experience of anxiety for older adults. As a result, anxiety may be underidentified and underdiagnosed (Harman, Rollman, Hanusa, Lenze, & Shear, 2002). Older adults with anxiety are more likely than younger adults to present with physical symptoms (Palmer, Jeste, & Sheikh, 1997). Moreover, their symptom profile may be different from that of younger adults. Despite being more likely to present with somatic symptoms, older adults with anxiety are less likely to report headaches or physical tension (Christensen et al., 1999). Studies examining psychophysiological responses associated with stress or anxiety suggest that older adults experience the effects of anxiety for longer periods of time due to slower recovery following autonomic arousal, and slower habituation to arousing stimuli (Chaudieu et al., 2007; Lau, Edelstein, & Larkin, 2001; Mantella et al., 2008). There is a need for more research on the unique experience and presentation of anxiety in older adults. It is possible that these differences may lead to underdiagnosis and treatment of mental health disorders.

In addition to being aware of different presentations of disorders among older adults, it is important to be aware of clinically significant, but subsyndromal levels of symptoms. There is evidence that some clinically significant symptoms are not captured by current DSM-IV criteria for major disorders (Lyness, King, Cox, Yoediono, & Caine, 1999). For example, studies estimate the prevalence of clinically significant subsyndromal or minor depression to be between 5 and 12% (Beekman, Deeg, Braam, Smit, & Van Tilburg, 1997; Blazer & Williams, 1980; Mulsant & Ganguli, 1999). Among older adults, even minor depression is associated with functional disability. Moreover, Beekman et al. (1997) estimate that another 14.9% of the population has clinically relevant symptoms of depression that do not meet criteria for either major or minor depressive disorder. People with minor depression and people with subsyndromal depression are more likely to go on to develop major depression (Lyness et al., 2006), emphasizing the importance of capturing these symptoms.

Similarly, subsyndromal anxiety is associated with increased impairment and with risk for developing psychiatric disorders (de Beurs et al., 1999). However, there is no formal classification for subsyndromal levels of anxiety. Thus, our current diagnostic system is likely neglecting meaningful levels of symptoms and perhaps precluding many impaired older adults from receiving needed treatment.

Another challenge to assessment of older adults is the prevalence of comorbid psychiatric disorders. The co-occurrence of major depression and anxiety is especially striking. Twenty-three percent of older adult clients with a diagnosis of major depressive disorder also carry a diagnosis of an anxiety disorder (Lenze et al., 2001). The high rates of comorbidity may be partly due to overlap in diagnostic symptoms (Maser et al., 2009). These comorbidities can further complicate assessment in older adults (Kogan, Edelstein, & McKee, 2000) and call into question the adequacy of our current system of classification and diagnosis.

There has been considerable discussion of the best ways to address the aforementioned diagnostic issues. Some have proposed that depression should be diagnosed on a continuum, to capture less severe, but relevant symptoms (Lavretsky & Kumar, 2003). Further, as the field looks toward the DSM-V, many argue that it should move toward a dimensional approach (Brown & Barlow, 2005; Helzer, Kraemer, & Krueger, 2006; Maser et al., 2009; Regier, 2007). This could lead to better diagnosis of mild symptoms and a reduction in comorbidities resulting from shared symptoms.

20.7 Dos and Don’ts

Do take into consideration a number of somewhat heterogeneous age-related variables when interviewing older adults. Several of these variables (i.e., sensory, memory, cognitive) can affect older adult performance and require consideration and accommodation on the part of the interviewer. Another factor, ageism, can influence the behavior of both the interviewee and the interviewer and requires a consideration of one’s attitudes toward aging and older adults. Similarly, an older adult’s cohort can influence the behavior of older adults and the interviewer. Finally, the influence of biological rhythms on the behavior of older adults, which is often overlooked in the assessment of older adults, requires consideration. We discuss each of these issues next.

20.7.1 Ageism

Ageism can occur with regard to any age group, although one is more likely to see its immediate effects and vestiges in the context of older adults. The term ageism was coined by Butler in 1968 and is defined as follows: “ageism can be seen as a systematic stereotyping of and discrimination against people because they are old, just as racism and sexism accomplish this with skin color and gender. Old people are categorized as senile, rigid in thought and manner, older fashioned in morality and skills…” (Butler, 1989, p. 39). More simply, Bytheway (2005) has defined ageism as “discrimination against older people on grounds of age” (p. 361). Ageism can be seen in the prejudicial attitudes toward aging and older adults, discrimination against older adults, the denial of respect and freedom through institutional practices and policies, and the limiting of opportunities for older adults through these practices and policies (Butler, 1980). Similarly, Bytheway (2005) argues that old individuals are viewed as “senile, rigid, old-fashioned, inferior, and so on” (p. 362).

Ageism can be manifested in the assessment process through stereotypes and misconceptions of older adults (Edelstein et al., 2003b). A clinician who believes that older adults are typically set in their ways, sick or disabled, that the cognitive skills of all older adults are diminished significantly, and that most older adults are senile and mentally ill can easily bias the interview assessment process and outcome. Such bias can influence the recommendations that arise from the biased assessment. For example, if a clinician believed that an older adult was set in her ways and unable to learn new skills or benefit from therapy, the clinician would be less likely to refer the individual for therapy (Edelstein et al., 2003b; Thompson, Gallagher, & Breckenridge, 1987). Finally, older adults are more likely to be given a medical diagnosis than younger adults and are more likely to receive medications rather than a psychosocial intervention (Gatz & Pearson, 1988; Rodin & Langer, 1980).

Health professionals may therefore be less likely to refer older adults for therapy. However, therapy has been found to be equally as effective with older and younger adults (e.g., Knight, 2004; Thompson et al., 1987). In assessing older adults, there is a tendency for medical and psychological problems to be attributed to age (Rodin & Langer, 1980). Although some problems may be a consequence of aging, the misattribution of problems to aging may be dangerous. For example, a belief that depression and sadness are normal parts of aging may preclude a diagnosis of major depression in an older adult who could benefit from treatment. This finding likely contributes to the overmedication of many older adults and increases the risk of adverse drug interactions. Because physicians commonly prescribe drugs to treat older adults with mental disorders, referrals to mental health professionals are less frequent than for younger adults (Gatz & Pearson, 1988).

Clinicians should become informed about the myths of aging and the empirical literature that serves to eradicate such misconceptions. Moreover, they should explore their own personal attitudes and how they might affect the assessment of an older adult (Dupree & Patterson, 1985).

20.7.2 Sensory Processes

Normative age-related changes in the sensory system (*see* Whitbourne, 2005) can influence the information obtained during interviewing, the interview process, and the behavioral observations of the interviewer. Sensory changes can negatively affect performance of activities of daily living, mobility (including driving), memory, participation in leisure activities, and psychological symptoms (Edelstein, Martin, & Goodie, 2000; Gould, Smith, & Edelstein, in press). Visual changes include change in color perception and impaired vision resulting from macular degeneration, cataracts, and glaucoma (National Eye Institute, 2002). Even among older adults, the incidence of these disorders increases greatly with age (Lee, Feldman, Ostermann, Brown, & Sloan, 2003). These visual changes then lead to impaired performance on assessment instruments and increased difficulty in completing self-report measures. Visual changes can increase an older adult's risk of falling and involvement in auto accidents and decrease the frequency of or nature of social behaviors. At the beginning of the interview, it is important to ask older adult clients if they use eye glasses or corrective lenses. If a client endorses using eye glasses, the interviewer can encourage the client to use them during the interview. The interviewer can provide magnifying lenses, print materials in a larger point font (14–16 point), and nonglossy paper to decrease glare to assist older adults with visual impairment.

Age-related hearing loss (presbycusis) affects about 30–35% of individuals aged 65–75 years (National Institute on Deafness and Other Communication Disorders, 1997), 40–66% of individuals aged 75 years or older, and 80% of individuals aged 85 years or older (Yueh, Shapiro, MacLean, & Shekelle, 2003). Older adult clients with hearing loss may have increased paranoia or depressive symptoms (Edelstein et al., 2000). The interviewer should ask if the client uses a hearing aid or other corrective device and, if so, the client should be encouraged to wear the device during the interview (Edelstein et al., 2003a). Behavioral observations are important for providing clues to hearing difficulties. If an older adult client adjusts his or her head, leans forward, or asks for questions to be repeated, these observations may suggest that the client is having difficulty in hearing (Edelstein et al., 2003a). To accommodate individuals with hearing difficulties during the interview, the interviewer can use an erasable board (e.g., a white board) as a communication aid. The interviewer should sit close to the older adult client, face the client so that the client can see the facial expressions and lip movements of the interviewer, minimize background noise, and speak in short, simple sentences (National Institute on Deafness and Other Communication Disorders, 1997). Further, when speaking to individuals with hearing loss, it is important that the speaker speaks slightly louder than normal but not shout. Do not over exaggerate words because this makes it more difficult to read lips. When possible, offer information to the individual with hearing loss about the topics of the interview (National Institute on Deafness and Other Communication Disorders, 1997). Oral questions during the interview can be presented in written format and brief assessments of memory recall and recognition using visual stimuli instead of auditory stimuli (e.g., show three objects to remember) can be employed.

Communication is an essential part of the diagnostic interview. Providing assistance to individuals with sensory impairment will increase the validity of the observations and information provided during the interview. Use of nonverbal and verbal indicators of receptive listening that are tailored to avoid the client's sensory impairment on the part of the interviewer may assist in building rapport. For example, leaning toward the client and nodding may be more effective in demonstrating interviewer's interest and empathy than attempting to use reflective statements with a client with hearing impairment.

20.7.3 Memory and Cognitive Abilities

Some changes in memory and cognitive abilities with age are normative (e.g., working memory, information processing speed, reaction time), whereas other changes are pathological (e.g., diminished long-term memory; see Whitbourne, 2005, for a detailed discussion). Older adults are slower at encoding information (e.g., Salthouse, 1993). Other memory difficulties are observed in management of irrelevant information in memory and difficulty in monitoring the sources of the encoded material (e.g., Gilsky, Rubin, & Davidson, 2001). Older adults experience impairment in working memory that utilizes verbal and visual information (e.g., Park et al., 2002) and spatial locations (e.g., Salthouse, 1995). This impairment in working memory suggests that older adults may have difficulty in retrieving information, utilizing information in problem solving, making decisions, or learning new information (Edelstein et al., 2003a). However, recent studies have found that working memory for emotional information is not impaired in older adults compared to younger adults (Mikels, Larkin, Reuter-Lorenz, & Carstensen, 2005). Specifically, when working memory involves positive emotions, older adults perform better. In contrast, younger adults perform better with working memory for negative emotions (Mikels et al., 2005; for a review of this positivity effect, see Carstensen & Mikels, 2005). Interviewers are encouraged to consider relative strengths and weaknesses when obtaining information during a diagnostic interview, assessing mental status, and in employing interventions with older adults. The interviewer can help use emotional events as anchors in time while asking older adults to provide information about the onset or duration of symptoms. Other cognitive processes, specifically creativity, have been found to be stable or even increase with age (Simonton, 2000).

To improve the validity of the information and to decrease possible distress on part of the client, the interviewer may suggest that clients bring documents or records to aid in interview (e.g., bring in medication bottles, sleep diary, etc.). Providing complex information in smaller elements, encouraging the client to take notes during the interview, and ensuring that the client has retained information about the conversation before shifting the discussion to a different aspect of the interview may help ensure that the client understands information presented during the interview (Edelstein et al., 2000). Asking short, concrete questions and facilitating smooth transitions between topics can help decrease problems older adult clients may experience due to extraneous information or becoming side-tracked. When the client is answering questions, the clinician should provide the client with more time to answer to account for slowed information processing (Edelstein et al.). When the client seems to have difficulty in making a decision, the interviewer could ask the client to describe his or her thought process. Involving other informants in the diagnostic interview would improve the validity of the information obtained.

20.7.4 Circadian Issues

Performance on cognitive tasks varies with the time of day, reflecting the rhythms of biological functioning. Studies with both humans and animals have found that peak task performance occurs at the same time as peak physiological performance (May, Hasher, & Stoltzfus, 1993). For older adults, peak physiological performance tends to occur in the morning, reflecting a possible circadian shift later in life (for a review see Yoon, May, & Hasher, 1999). During peak circadian times, inhibitory processes are greater, and performance on tasks that require more effortful processing (e.g., problem-solving, working memory) is improved. Interestingly, performance on implicit memory tasks is greatest during off-peak times (May, Hasher, & Foong, 2005). This is important to consider when interviewing and designing treatments for individuals with dementia, who have intact implicit memory, but less intact explicit memory. When assessing and interviewing older adults, greater performance would most likely be elicited earlier in the day. If possible, individual differences in "morningness" and "eveningness" tendencies should be taken into account when scheduling interviews and assessments. Recording the time of the interview and mental status exam is important so that the client's performance can be evaluated in relation to his or her optimal circadian peak time (Edelstein et al., 2003b). This will also increase reliability across test administrations over time.

20.7.5 Cohort Issues

As was mentioned earlier, the cohort of the client may influence different aspects of the interview. In particular, individuals from earlier cohorts may be less likely to disclose sensitive information before rapport is established. Earlier cohorts may be skeptical about seeking mental health treatment due to fears of stigmatization. The client's beliefs about privacy and views on gender roles, sexuality, and religious values may differ from the interviewer's; however, it is important for the interviewer to not offend the client and to be sensitive to any stigma associated with these views and beliefs (Edelstein et al., 2003b). Using warmth, sensitivity, and effective communication, the interviewer can gain the client's trust and thus obtain more accurate information about the client's presenting problems.

20.8 Summary

The interview is arguably the most important assessment method used with older adults, and it is the first step toward the development of rapport and potentially a therapeutic relationship. It is only one method and therefore has its strengths and weaknesses, as any single assessment method. Nevertheless, the interview can be employed effectively with older adults if one is knowledgeable of the many age-related changes across a wide variety of domains (e.g., cognition, sensation) that can contribute to the interview assessment process and outcome. We have briefly reviewed many of the factors one should consider when interviewing older adults and, in many cases, offered practical suggestions for addressing or accommodating these factors. Older adults offer complex and interesting challenges in the interview that contribute to the satisfaction one experiences when all of the elements of an assessment interview are integrated into meaningful and practical conceptualization.

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Chapter 21
Interviewing in Health Psychology and Medical Settings

Jay M. Behel and Bruce Rybarczyk

21.1 Introduction

Psychologists are increasingly being employed in health-care settings, in the specialty area of clinical health psychology, where they address a wide range of mind–body issues. This trend marks a shift away from the centuries old Cartesian mind–body dualism that permeated the fields of psychology and medicine for most of their modern history. The *biopsychosocial model* (Engel, 1977) represents a contemporary alternative to mind–body dualism. This paradigm recognizes that the interrelationship between medical, psychological, behavioral, sociocultural, and environmental factors impact objective and subjective experiences of health and illness. The dualistic question of whether a patient has a "mental or physical problem" is viewed as an artificial one, as psychologists strive to facilitate an integrative understanding and treatment of psyche and soma. As an extension of the biopsychosocial model, psychologists in medical settings are simply seen as health professionals, rather than mental health professionals, in recognition of their participation in improving both the mental and physical health of their patients. They are, in fact, regarded as a central part of the health-care team in many settings discussed below.

Biopsychosocial orientation notwithstanding, it remains crucial for psychologists in medical settings to be strongly grounded in traditional mental health diagnosis and treatment. Other health professionals rely on psychologists to be experts in identifying co-morbid psychological disorders and providing treatment or treatment recommendations for those disorders. As such, clinical psychologists in medical settings ought to have a strong generalist foundation before progressing to more specialized training in clinical health psychology. Similarly, psychologists need to

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draw upon a wide scope of theories of behavior, personality, and psychopathology. For this reason, beyond their initial training, clinical health psychologists must continue to update their knowledge in mental health diagnosis and treatment throughout their careers.

This chapter describes a range of different settings and populations in which clinical health psychologists provide assessments, the procedures for gathering information for assessment, some important information needed to make psychiatric diagnoses, examples of two assessments that incorporate these methods, and the consideration of diversity issues in this specialty population. Finally, we provide a set of "dos and don'ts" derived from several decades of combined clinical experience by both authors as well as the advice given by seasoned professionals in clinical health psychology.

21.2 Medical Settings and Populations

Because virtually every person is a medical patient at some point in his or her life, it is difficult to describe "typical" medical patients. One can, however, describe the medical settings and situations in which psychologists are most often called upon to evaluate patients. For the purposes of the current chapter, the term *medical setting* will refer to any venue in which physicians are the primary clinicians and in which physical health is the primary focus. Such settings would include primary care and specialty offices and clinics, acute care, inpatient facilities and acute, subacute, and outpatient physical rehabilitation programs. Under this definition, an outpatient breast cancer clinic would be classified as medical but an inpatient psychiatry unit would not. Although the principles outlined in this chapter would certainly apply to psychologists who see medically ill patients in their outpatient practice or offer health promotion interventions in the community, those settings are not explicitly considered or discussed in this chapter.

Before exploring the more common patient scenarios, it is important to understand the psychologist's role in medical settings. Most commonly, psychologists are regarded as *consultants*; that is a specialist called upon by an attending physician (inpatient), primary care physician (outpatient), or another specialist to evaluate, deliver an opinion about, and perhaps treat a certain aspect of the patient's presentation. Consequently, psychological evaluations on inpatient units often are referred to as "consults" and the division within a hospital-based psychiatry department where psychologists are frequently employed is often named the "Consultation and Liaison Service."

The consultant role, itself, does not shape the content of the evaluation, but it can define the primary relationship in the evaluation process. Specifically, by requesting the psychologist's expertise, the attending/referring physician is implicitly defining the critical relationship as that between physician and psychologist. This obviously does not preclude a full and ultimately independent therapeutic relationship with the patient. However, it is important that the patient be made aware of the dimensions of the initial evaluation and be given an opportunity to consent to or decline an evaluation, the results of which will be shared with their attending physician. Nevertheless, given the initial centrality of the physician–psychologist relationship, providing the referring physician a clear description of findings and associated recommendations in writing (and often verbally as well) is a critical component of the evaluation.

The patient factor(s) that psychologists are asked to evaluate may be as broad as “emotional functioning” and as specific as the patient’s ability to adhere to a medication regimen. Physician referral patterns are highly variable. Some physicians refer a significant portion of their patients. Others refer patients with specific diagnoses, and still others refer patients whom they regard as difficult or whose condition is treatment resistant.

An additional concern is that of the referral question. Across medical settings, psychological evaluations are requested for a specific purpose (even if that purpose is as broad as an “emotional evaluation”) usually termed the referral question. Again, these questions may be very specific, very general or may be omitted altogether. Well-framed referral questions can help psychologists shape clinical interviews that are thorough yet efficient, while overly broad or inappropriate questions can make this task more difficult. Regardless of how specific and well-crafted a referral question is, it is important for psychologists to keep their own professional standards and responsibilities in mind and not be guided by the referral question alone.

Keeping these general considerations in mind, we can turn to some specific settings for psychological consultation as well as some specific medical diagnoses that more often call for a psychologist’s involvement. The traditional acute care inpatient hospital unit is, perhaps, the quintessential medical environment. In this setting, psychologists are called upon to address a wide range of issues. Such consults may be requested to assess medically ill patients for the presence and severity of Axis I and II psychiatric disorders whether alluded to in the patient’s history or not. They may also be asked to provide maintenance care to patients who are receiving more long-term mental health services outside of the hospital. The relevance of ongoing or historic psychiatric difficulties to current medical problems and procedures often is central to acute care referrals. Psychologists are also asked to weigh the relative contribution of emotional distress and physical discomfort to a patient’s overall presentation. Cognitive assessment, from brief screenings to comprehensive neuropsychological assessment, may also be a target of psychological assessment in acute care. Finally, psychologists are frequently called upon to help patients and their families process and cope with distressing diagnostic and prognostic information.

Outpatient primary care is another common venue for psychological assessment and intervention. As with acute care, the interrelation of psychic and physical distress can be an important component of psychological practice in a primary care setting. Similarly, primary care offers an excellent opportunity to conveniently address Axis I and II psychiatric disorders that have otherwise been ignored, missed, or undertreated by patients and other care providers (Davis, 2004). However, primary care also is a setting in which health promotion, secondary prevention and treatment adherence interventions may be effectively undertaken. Consequently, assessments in these settings ought to explore not only physical and mental health but also patients' health habits and beliefs, their understanding of and ability to comprehend medical information and attitudes toward their doctors and the health-care system. Where a highly integrated approach is employed in primary care, psychologists are called upon to provide brief services to a wide range of patients rather than extensive services to fewer patients. Accordingly, in this model, assessments need to be even more brief and problem-focused.

A third, broad setting to consider is that of the acute, inpatient rehabilitation unit. These are units within larger medical centers or free-standing facilities that provide intensive rehabilitation services to patients experiencing significant debility secondary to an acute or chronic medical condition. Rehabilitation services include medical monitoring by a physiatrist, nursing care, and daily physical, occupational and (depending on the diagnosis) speech therapy. Opportunities to work with a recreational therapist and chaplain are frequently offered as well. Moreover, unlike most acute and primary care settings, most inpatient rehabilitation programs include psychologists as integral members of the treatment team with psychological assessment and intervention playing a critical role in treatment and discharge planning. In some facilities, this means that a psychologist evaluates every patient whereas in others only patients with specific medical or psychiatric histories are referred for evaluation. Although evaluations in rehabilitation settings remain thorough, special attention is paid to a patient's current and historic level of physical, cognitive, and emotional functioning, their goals and expectations for rehabilitation and recovery, and the support available to help the patient bridge discrepancies between level of functioning and preferred discharge plan. Because significant numbers of rehabilitation patients are admitted following acute neurological changes such as stroke and traumatic brain injury, cognitive assessment is an important component of rehabilitation, and psychological services on these units often are provided by or in concert with a neuropsychologist.

Although medical diagnoses in and of themselves are relatively poor predictors of affective distress and need for psychological services, several diagnostic groups are more likely to receive specialized psychological services. First, patients broadly described as having chronic pain are frequently referred for psychological evaluation. These evaluations typically include a detailed pain history, including the duration, location, and intensity of the pain as well as an accounting of medical interventions undertaken to address the pain, current and past medication regimens and the impact of the pain on the patient's occupational, physical, relational, and sexual functioning. In evaluating patients with chronic pain, the clinical interview often is supplemented with both a pain-specific objective measure such as the Multidimensional Pain Inventory (MPI; Kerns, Turk, & Rudy, 1985) as well as one or more general measures of distress, for example, the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1994) and personality, for example, the Personality Assessment Inventory (PAI; Morey, 2007).

Evaluation of a patient with chronic pain may be undertaken for a variety of reasons. The assessment may simply be a prelude to psychotherapy, and the patient's pain experience obviously remains relevant, even when treatment goals are unrelated to the pain. A chronic pain evaluation may also be requested by the physician treating the pain either as part of a work-up preceding a new course of medical treatment or surgical intervention or to initiate pain-specific psychological interventions such as biofeedback. In considering work with individuals with chronic pain, two widely held patient and physician biases should be kept in mind. First, chronic pain patients may be labeled as "drug-seeking," "manipulative," or "attention-seeking," and some physicians only refer pain patients who they so label. While there certainly are challenging patients for whom such labels are justifiable, it is important that psychologists monitor their own responses to patients and avoid letting such pejorative labels color their assessment. On the other hand, patients with chronic pain often regard referral to a psychologist as an implicit judgment by their physician, indicating a belief that their pain is "in my head" or "not real." Consequently, providing education and reassurance about psychological perspectives on chronic pain can be an important part of the initial assessment.

Individuals with cancer often receive specialized psychological services (often termed *psychosocial oncology*). Although there is considerable variability in the decisions and issues confronting an individual with cancer, most such evaluations should include assessment of the patient's understanding of his or her diagnosis and prognosis, the extent to which he or she has shared medical information with their family and friends, expectations, beliefs and preferences about pain and pain control, body image concerns, and, as relevant, end-of-life issues. Psychologists may be asked to evaluate a patient at any point in the diagnostic and treatment process. Common settings for such evaluations include outpatient, diagnostic clinics such as a breast cancer clinic, inpatient units when a patient is hospitalized and hospice units near the end of life. Psychologists working with cancer patients also see these individuals in the more traditional outpatient office settings, often providing psychotherapy over the entire course of an illness and beyond.

Patients awaiting heart, lung, and liver transplant comprise a third category of patients who frequently are referred for psychological evaluation. Although psychotherapeutic work may follow such an evaluation, pre-transplant assessments are almost always requested as a means of determining whether the transplant candidate has the cognitive and emotional resources to understand the risks and benefits of the transplant, adhere to posttransplant treatment regimens and if applicable, maintain abstinence from alcohol, cigarettes, or illicit drugs. A similar approach is taken to candidates for bariatric surgical procedures that reduce the size of the stomach in severely obese individuals. The goal of these evaluations is to determine whether patients have made a sufficient effort to lose weight by more conservative means, have realistic goals about losing weight, and understand the risks and limitations of such procedures. Psychologists providing these interventions are often in multiple roles, including as an objective evaluator who assists in making whether the patient is a good candidate for a procedure. As such, patients may be reticent to reveal information that may affect their chances of receiving the surgery, so creating rapport and trust are essential to the evaluation. Convincing the patient that you are acting in their best interest and that you base your recommendations on the best data available regarding chances of success following the procedure is essential as well.

21.3 Procedures for Gathering Information

21.3.1 Chart Review

A review of the patient's medical record usually occurs prior to the clinical interview. This allows the examiner to focus on what is not already known and documented. While there is much redundancy and detail that goes beyond the scope of what psychologists need to know, the chart provides several important kinds of information including: demographic and social history, current medical problems and medical history, current medications and medical issues that remain unresolved. Nurse and physician observations about cognitive functioning, interpersonal conflicts with staff, compliance with treatment and safety precautions, and any particular sources of anxiety may also get charted. It is essential for psychologists to learn medical terminology, jargon and acronyms. For example, the notation "MSΔ" in a medical chart may be used to indicate mental status changes and often is used as a shorthand indicator for a wide array of cognitive and behavioral issues. Apart from asking medical staff and patients themselves to educate you, various websites that educate the public about medical conditions and their treatments are an excellent starting point for information.

21.3.2 Clinical Interview

The clinical interview is by far the most valuable tool for the psychologist in the health setting. Perhaps more than in most settings, the introduction is a crucial element of the interview. Since the patient has often not been informed of the purpose of the assessment or was given a very cursory explanation, it falls upon the psychologist to clarify his or her role or the purpose of the assessment. It is important to be both frank and tactful. One of the most common responses to the unexpected appearance of a psychologist is the half-joking question "are you going to figure out if I am crazy or not?" Similarly, in primary care the patient may have agreed to meet with the psychologist because he/she trusts his/her physician and he or she "told me to talk to the psychologist."

Psychologists must experiment with and develop their own style of putting patients at ease and answering any questions they may have. One element of an effective introduction is a statement that psychologists are an essential part of a health-care team that aims at treating the whole person and that quality of life is one of the most important aspects of good medical care. Sometimes it helps to underscore that psychologists in the health-care setting do not focus on “abnormal people” but “normal people in abnormal situations.” If the patient is known in advance to be reticent it can be beneficial to have the physician make the introduction or have the psychologist participate in medical rounds initially. Other effective techniques include avoiding stereotypic psychologist behaviors and jargon, starting with a light topic of mutual interest that provides an opportunity for self-disclosure by the psychologist, and using respectful humor where possible (Van Egeren, 2004).

The examiner should begin by asking broad, open-ended questions that encourage the patient to relate his or her perspective as a cohesive narrative. Opening interviews in this way serves several purposes. First, the patient is given a degree of control over the evaluation process and is encouraged to relate his/her story in a way that is comfortable for him or her. This issue is particularly important in the inpatient setting, as patients often frequently feel “bombarded” by a long series of focused questions; moreover, the lack of conversational give and take can inhibit the development of rapport. As patients relate their history, they typically provide many potential openings for the examiner to ask follow-up questions with the patient’s own story offering an implicit invitation to explore more sensitive topics. This open-ended approach also gives the examiner a valuable opportunity to make behavioral observations about the patient’s cognition, energy level, observable pain, and affective regulation. After the patient is finished with his/her narrative, the psychologist can switch to focused inquiry to fill out the missing information and detail. Table 21.1 outlines the typical elements that should be included in the phase of the interview in general medical setting interview.

The somatically focused patient is a common interviewing challenge. Patients may spend the entire interview time reiterating painstaking details of what has happened to them medically and may be reluctant to discuss psychosocial factors in their illness. The best interviewers are able to draw out the broader illness narrative and pick out underlying themes, such as uncertainty and fear about the future, disappointment with the care that has been received, loss of faith in trusted providers, perceived skepticism on the part of providers and family regarding the legitimacy of the illness, etc. Joining with the patient by empathizing with these experiences is an important first step toward building rapport. Additionally, when somatically focused patients are resistant to discussing psychosocial issues related to their illness, it is more prudent to take a “back door” approach by keeping inquiries about an individual’s psychosocial history separate from inquiries about the medical history (Van Egeren, 2004).

An advanced skill described by Belar and Deardorff (1995) is for health psychologists to “both elicit and negotiate the patient’s health belief model” (p. 116) during the interview. This means that the psychologist attempts to understand the strict and often rigid biomedical views of the patient but also to reinforce and teach views that are more compatible with the biopsychosocial model. This may include introducing the role of stress in illness, the concept of secondary pain brought about by tensing muscles, how medical symptoms differ in their psychological experience depending on their predictability and controllability, etc. This “negotiation” process

Table 21.1 Brief outline for general clinical health psychology interview

Medical history and narrative
- Patient narrative emphasized, facts taken from chart
- Patient's explanatory model of illness including causes, why it started when it did, how severe is it, and what he or she thinks would be the best treatment
- Previous psychiatric history, including diagnoses and treatments (counseling included)
- Understanding of purpose of any current psychiatric medications

Social history
- Family of origin, including any major medical or psychiatric illnesses
- Current social support system, including significant others
- Education and employment, including financial stressors
- Religious community
- Legal history, including litigation related to medical conditions and disability

Coping and psychological functioning
- Clinical and subclinical depression or anxiety symptoms
- Coping, including strengths and benefit finding from chronic medical conditions
  "Given the challenges of your medical condition, what things do you do to try to maintain a positive outlook and mood?"
  "What, if any, positive changes have occurred in your life as a result of your illness?"
- Hobbies and activities for recreation and how they have changed due to illness
- Alcohol and "recreational" drug use
- Sleep, including perception of quality, type of difficulties, caffeine use, and regularity of schedule
- Satisfaction with sexuality, even when partner is not reported
- Religious/spiritual coping
  What part, if any, do spiritual beliefs and religion play in coping

Cognitive functioning
- Behavioral observations: speech patterns, remote memory and chronology of events, behaviors, insight into deficits
- Subjective and/or collateral report
  "Have you or your family noticed any changes in memory or concentration since your illness?"
- Formal screening or referral for neuropsychological testing as needed

has the goal of finding a common ground of agreement and providing foundation for any future interventions that address psychological factors.

A thorough discussion of cognition and cognitive testing is beyond the scope of this chapter (see Chap. 6 for a full discussion of neuropsychological testing and interviewing). It is necessary to assess for cognitive deficits in all patients because of the effects that a great range of illnesses and their treatments have on cognition, including those that are not neurological diseases per se (e.g., diabetes, chemotherapy). This may include collecting information from collateral sources (e.g., family, nurses) and employing both formal and informal assessment during the interview. For assessment in this setting it is important to recognize the potential interplay of physical, emotional, and cognitive factors in all medical patients particularly those with acute sources of physical distress. An individual with generally intact cognition can appear quite impaired in the context of acute illness or sedating medications. Conversely, examiners can be misled into interpreting genuine cognitive deficits as simple fatigue. Consequently, a reliable screening measure should be included as a routine part of most, if not all, psychological evaluations of medical patients. Reliable and valid screening instruments range in brevity from the Mini Mental Status Exam or Modified Mini-Mental Status Examination (3MS; Teng & Chui, 1987) to the Cognistat (Oehlert et al., 1997) and Repeatable Battery for the Assessment of Neuropsychological Status (RBANS; Randolph, Tierney, Mohr, & Chase, 1998).

21.4 Case Examples

21.4.1 Case #1: The Rehabilitation Patient

The patient is a 76-year-old Caucasian woman admitted to an acute rehabilitation unit following a left total hip arthroplasty (THA) undertaken secondary to advanced degenerative joint disease (DJD). Psychological evaluation was requested as a routine part of the rehabilitation program.

21.4.1.1 Chart Review

Per the medical record, the patient has a past medical history (PMH) notable for osteoarthritis, DJD, hypertension, diabetes mellitus, spinal stenosis, and a right THA 8 years ago. Although no psychiatric history is noted, her current medication regimen includes citalopram (40 mg/daily). Her social history, per the medical record, is negative for cigarette smoking, alcohol, and drug abuse. She lives in a "senior building" and has family nearby. Additionally, a social worker's note describes the patient as a retired factory worker and religiously active Roman Catholic. She has five adult children and several grandchildren. An initial nursing note describes the patient as alert, oriented, and cooperative.

21.4.1.2 Clinical Interview

The patient was evaluated in her private hospital room in the afternoon. The examiner explained the role of the Psychology service on that unit and began the evaluation. The patient was agreeable to assessment, although she reported having a "rough" day. The examiner encouraged the patient to clarify the factors contributing to her bad day, and she reported having difficulty in physical therapy earlier in the day and noted that her pain seemed greater and subjective rate of recovery slower than her prior hip surgery 8 years earlier.

In initially relaying her history, the patient provided only a brief description of both recent and remote facts, and needed frequent prompting and follow-up questions to provide a complete history. For example, the patient initially offered simply that she was widowed and that she was living alone in an apartment building for senior citizens. Direct and specific follow-up questions were necessary to elicit the details of her husband's death and the reasons for and her feelings about the move to the apartment building.

With more such prompting, the patient related the many difficulties she had experienced in her life including the early deaths of her mother and husband as well as several miscarriages early in her marriage. The patient also described close relationships with her children and grandchildren but observed that she rarely sees them. She repeatedly used the word "alone" to describe her typical state. She described generally good health and mobility. Sad affect of restricted range was observable.

The patient denied any history of receiving formal mental health services. She reported "maybe" having "a little" depression in the past and noted that she "worries" a great deal. She also denied any family psychiatric history. The patient was aware that an antidepressant was part of her medication regimen and reported that it had been prescribed by her primary care physician. She was uncertain of the reason for the medication having been prescribed or whether it had been effective.

The examiner further explored the patient's psychiatric history by (1) encouraging her to elaborate on experiences of "worry" and feeling "alone" and (2) by asking more pointed questions about psychiatric hospitalization, psychosis, and traumatic experiences. With such prompting, the current patient was able to provide considerable additional information. Specifically, she acknowledged chronic, mild low mood for much of her adult life. She was unable to recall any previous periods of more intense symptoms of depression but did report increased worry, delayed sleep onset, and nervousness during times of stress, noting that she had always regarded these periods of anxiety as "like depression." She denied any history of suicidality, panic, trauma, or psychosis. The examiner also was able to draw upon information from earlier in the evaluation to help the patient place her episodes of distress in context with major life events.

The end of the psychiatric history often is a good time to obtain substance abuse histories and explore a patient's typical health habits including exercise, diet, and adherence to medical recommendations and medication regimens. For the current patient, there was no significant substance abuse history, and her physical health habits and treatment adherence were good.

Although the patient characterized her recent mood as "okay, I guess," she endorsed many physical symptoms of distress (low energy, disturbed sleep, variable appetite) and reported decreased motivation just prior to and since her recent surgery. She also acknowledged significant worry about her health. However, she denied low mood, anhedonia, feelings of guilt, worthlessness, helplessness or hopelessness, and suicidal ideation. However, her overall presentation and score of 9 of 15 on a verbally administered Geriatric Depression Scale-15 (GDS-15; Sheikh & Yesavage, 1986) pointed to a likely Major Depressive Episode of mild-to-moderate severity. This diagnostic picture, of a person denying most positive symptoms of depression while endorsing clinically significant levels of negative symptoms, is fairly common in older adults (Gallo & Rabins, 1999), and for the current patient, this was further complicated by her long-standing tendency to mislabel anxiety as depression.

The examiner then pursued a discussion of the patient's current difficulties with the rehabilitation program. He asked specific questions about the patient's postsurgical pain and other physical demands of the physical and occupational therapy. She rated her pain as manageable (typically 1–4 of 10) and responsive to medication. However, she again noted feeling fatigued and overly challenged by the activities suggested by her physical and occupational therapists. She also offered that many of the therapeutic exercises did not "make sense," that is, she did not see a link between the activities and the ability to resume her accustomed lifestyle. She acknowledged that she had not expressed these concerns to her therapists.

Next, the examiner asked about the patient's typical and current means of coping with challenging and distressing situations. The patient reported using distraction (watching television) and prayer to deal with negative affect but also reported that she typically avoided discussing her feelings with her family, because she wanted to avoid worrying them. She also acknowledged difficulty distracting herself during her hospitalization, and she reported feeling cutoff from her church because she had been unable to attend services for several weeks. The examiner provided a moment of empathic reflection and assured the patient that he would revisit her concerns at the end of the evaluation. Finally, the examiner proceeded to the cognitive assessment, administering the Modified Mini-Mental Status Examination (3MS; Teng & Chui, 1987). The patient achieved 89/100, reflecting no gross cognitive impairment.

At the closing of this initial evaluation, the examiner summarized his initial impressions for the patient. He related the impression that long-standing anxiety and acute physical distress had precipitated an episode of depression and that all three factors were interfering with her participation in the rehabilitation program. He further recommended working with her on focused, cognitive-behavioral interventions to improve mood. He explained that longer-term psychotherapy and consultation with a Psychiatrist were additional treatment options to be considered later. The patient was receptive to these initial recommendations and agreeable to working with the examiner.

Following this initial assessment, the examiner spoke with the referring physician and wrote a brief (one page) report including the recommendation for psychotherapy during her rehabilitation stay. The report was added to the patient's medical record.

21.4.2 Case #2: The Primary Care Patient

The patient is a 57-year-old African-American man seen in his primary care physician's office following a yearly physical examination. His PMH was notable for diabetes mellitus, hypertension, and benign prostatic hypertrophy. His doctor had asked the psychologist to evaluate the patient in advance of the exam and had alerted the patient to this request. In this physician's practice, a psychological evaluation was recommended for all patients managing more than one chronic illness. The patient was seen in a casually furnished office separate from the examination room.

21.4.2.1 Chart Review

The medical record revealed the above reported medical history, a medication regimen including medications for hypertension and diabetes, a 1.5 pack per day smoking history for more than 30 years and a family history of colon cancer and heart disease.

21.4.2.2 Clinical Interview

This interview began with a description of the psychologist's role in that practice as well as some very general information about the challenges of managing multiple medical problems. The examiner then proceeded to inquire about the patient's previous experiences with mental health professionals. Although asking about psychiatric history so early in an interview is not typical, this tactic can be effective when the referral question and patient history suggest a focus on health and health habits rather than psychiatric factors. The current patient denied any personal psychiatric history.

The interview progressed to a review of the patient's psychosocial history. He described a happy marriage to his second wife of 18 years and positive but somewhat distant relationships with his three adult children from his first marriage. Other sources of social support included two brothers, a brother-in-law, and cousins. The patient noted that he and his wife provided substantial assistance to their 82 and 84-year-old mothers. He reported completing high school and vocational training and had been working as a tool and dye maker for the past 29 years. He expressed the sentiment that he "makes a good living" but that the possibility of being laid off from his work was frequently discussed. The patient described his life as "active" and "busy," and he identified several outdoor hobbies (golfing, ice fishing, hunting) as sources of enjoyment and relaxation.

The patient demonstrated a good understanding of his medical conditions and reported good adherence to his medication regimen. However, he acknowledged poorer adherence to the dietary restrictions related to his hypertension and diabetes as well as difficulty maintaining an exercise regimen. Consequently, he had been unable to achieve the 20–30-pound weight loss recommended by his doctor. He also was frank in acknowledging his ongoing smoking habit. He reported two brief periods of heavy alcohol consumption (following high school and at the end of his first marriage) but denied any ongoing alcohol abuse and reported drinking fewer than three drinks per week.

With regard to his current health habits, the patient expressed good motivation to improve his diet, get more exercise, and lose weight. He expressed an intellectual understanding of the potential benefits of not smoking but reported feeling, “not ready” to “give it up.” With some encouragement from the examiner, the patient identified socialization (talking with friends while smoking) and subjective relaxation as primary factors maintaining his smoking. At this juncture, it would have been very easy for the examiner to deliver a lecture about smoking and potential avenues for smoking cessation. This approach rarely is successful, and the examiner chose to focus on the health behaviors that the patient appeared motivated to change.

As with the patient’s smoking habit, the examiner helped the patient explore factors maintaining current patterns of diet and exercise, factors motivating changes in these behaviors and potential barriers to making such changes. This approach, a simplified and compressed version of motivational interviewing (Dunn, Deroo, & Rivara, 2001; Miller, 1983), may be conceptualized as more an intervention than an assessment technique. To a certain extent, this is true and employing this “double duty” approach often is effective and necessary in primary care as the evaluation session may be the only opportunity to intervene. The current patient was responsive to this approach and was able to identify significant barriers to improved health behaviors and was able to engage in problem-solving as to how to overcome these impediments.

One barrier to behavior change identified by the patient was the amount of subjective stress he experienced on a day-to-day basis and his consequent tendency to use food and sedentary activities like television as a means of managing stress. This insight allowed the examiner to not only explore the patient’s experiences of and responses to stress but also to begin more formally examining the patient’s current emotional state. This examination of course included questions about symptoms of depression, anxiety, and other psychiatric conditions. However, questions about physical symptoms (fatigue, pain, sleep, appetite, and sexual functioning) also were included. Again, this discussion allowed the examiner to explain the potential interrelation of physical and emotional distress and explore the patient’s experiences of this relationship. He was able to quickly identify multiple instances in which he had experienced fatigue and headaches in response to stressful work days as well as many examples of his using food and smoking as a response to such stress. However, he denied any broader signs or symptoms of affective or physical distress. With regard to positive coping, the patient again referenced his many close relationships as well as his hobbies.

As no gross cognitive impairments had been observed over the course of the evaluation, a formal screening was not undertaken. Likewise, given his insight and forthright discussion of his health habits, the patient was not asked to complete any objective measures assessing mood, coping, or health beliefs. However, in spite of the limited time typically allotted by psychologists in primary care, clinicians practicing in that setting ought to have a repertoire of such measures that they can draw upon as indicated.

At the conclusion of the current evaluation, the examiner summarized his impressions that the patient engaged in a mixture of adaptive and maladaptive coping responses and that many of his maladaptive responses directly impacted his physical health. The examiner further offered that a brief course of treatment targeting stress management could help the patient decrease the frequency of maladaptive coping responses and improve adherence with recommendations for weight loss and increased exercise. The patient was quite amenable to this plan and scheduled a follow-up appointment with the examiner. The examiner wrote a brief report and having obtained a release of information from the patient, discussed the findings with his physician.

21.5 Impact of Race, Culture, Diversity, and Age

As part of the biopsychosocial approach it is critical for psychologists in medical setting to attune to diversity issues in both the assessment process and content. In terms of process, for example, some racial and ethnic groups are reluctant to disclose beliefs, attitudes, and health practices that differ from the dominant culture. There may be also a culturally transmitted distrust of health-care professionals based on perceived inequities in the health-care system and historical experiences with exploitation by medical researchers. Although a given patient may start with distrust and privacy, a well-trained psychologist is often the member of the health-care team that has interviewing time and skill to build the trust necessary to elicit critical information related to beliefs and practices. On the other hand, in some cases a bias against seeking care from psychologists found among some cultural groups may provide an extra barrier in communication and rapport relative to other health-care team members. Additionally, the use of an interpreter can be very effective for some health-care communications but in the realm of psychological assessment can be problematic due to privacy issues and translational difficulties with more abstract psychological concepts and nuances of emotion.

In terms of the content of the assessment, cultural factors have an influence on risk factors for illness, the interpretation of symptoms, health behaviors, and ways of seeking help from health professionals. It is generally agreed that having a broad knowledge of common cultural issues in health care is a valuable starting point, but it is equally apparent that such generalizations can be very problematic and are often overshadowed by individual issues and life experiences. Therefore clinical health psychologists must strike balance between addressing cultural issues in their patients but, at the same time, not clumping patients together based on ethnic or racial group membership.

One important cultural issue in assessing medical populations is the degree to which *somatization* is employed as an idiom for expression of psychological distress. Cultures vary in both the extent to which somatization is used and the specific symptom domains where psychological distress is expressed. For example, stomach disturbances, excessive gas, palpitations, and chest pain are common domains in Puerto Ricans, Mexican Americans, and whites (Escobar, Burnam, Karno, Forsythe, & Golding, 1987) while some Asian groups express more cardiopulmonary and vestibular symptoms, such as dizziness, vertigo, and blurred vision (Hsu & Folstein, 1997). Even when somatization is the most comfortable and acceptable way for expressing distress, many individuals will acknowledge psychological symptoms when questioned further.

Religion is a sociocultural domain that should be considered in most if not all assessments in the medical setting, as it serves as an important coping resource for many patients. In particular, it can particularly important in the context of coping with disabling and chronic illness, life-threatening illness and death and dying issues. It can also be important as a factor in health behavior and health outcomes. For example, in the general population and among African Americans in particular, church attendance has been linked to better health outcomes (Powell, Shahabi, & Thoresen, 2003). Yet the biases found among psychologists and training programs for psychologists have generally favored avoidance of the topic in assessment.

In addition to cultural issues, it also is important to cultivate awareness of and sensitivity to lesbian, gay, bisexual, and transgender (LGBT) patients. Such sensitivity certainly is important in traditional mental health settings, but may be even more critical in medical settings. Many LGBT patients experience enforced invisibility in medical settings. This invisibility can stem from the patient's subjective sense that a particular venue is not a safe or comfortable place to be open about his or her sexuality or gender identity or from past unpleasant experiences (Eliason & Schope, 2001). Perhaps, more commonly, though, this invisibility is an outgrowth of assumptions of heterosexuality embedded in care providers' language. In other words, clinicians often frame questions about sex, sexuality, and relationships with the assumptions that such relations involve opposite sex and only opposite sex partners. For example, asking a new female patient about her "husband" both fails to invite discussion of any female partners and implicitly communicates a dismissal of such relationships as unimportant and irrelevant.

Furthermore, when their sexuality or identity is acknowledged, LGBT individuals may encounter subtle assumptions and blatant biases that inform how care providers ask about sexual history, relationships, and family structure. For example, gay men may encounter expectations of promiscuity, lesbian woman may be met with assumptions about gender roles in their relationships, and bisexual and transgender people may encounter challenges to the authenticity of their sexuality and gender identity. Moreover, older LGBT individuals may encounter additional forms of bias as they attempt to access care systems and facilities that are organized around heterosexist assumptions and meant to serve a cohort less familiar and comfortable with sexual diversity (McMahon, 2003). Even if one assumes that negative experiences in health care are relatively rare, it is not surprising that LGBT people are less likely to pursue routine medical care (Harrison & Silenzio, 1996).

Given this context of potential mistrust, it obviously is important to "build" clinical interviews that are sufficiently flexible as to invite open discussion of a patient's sexuality and gender identity while making no assumptions about the nature of that sexuality. Openness to discussing sexuality does not require that questions about sex and sexuality be central in an evaluation. However, it is important that a sexual history be thorough and that the questions about sexuality be respectful, specific, and informed (Bonvicini & Perlin, 2003). Questions that are too broad, vague or poorly worded can communicate a sense that the clinician is inexperienced, uncomfortable, or both. Consequently, it is important that clinicians familiarize themselves clinically and socially appropriate language for discussing sex and sexuality with all of their patients. It may also be helpful to become familiar with slang terms from LGBT culture, although it is not appropriate for a clinician to introduce such terms into an interview. Furthermore, some slang terms are seen as "belonging" to LGBT people. In certain contexts, use of such terms (e.g., "queer") by LGBT clinicians may be acceptable, whereas use by a cisgender (person for whom there is a match between biologic gender and gender identity), heterosexual clinician would most likely be perceived as inappropriate or even offensive.

21.6 Information Critical to Making a Psychiatric Diagnosis

In contrast to traditional mental health settings, psychological work in medical settings typically is less focused on establishing official multiaxial DSM-based diagnoses for each patient. Even when they are identified and reported, such diagnoses may not be the actual focus of the assessment and subsequent therapy. In fact, the Current Procedural Terminology (CPT) Health and Behavior codes allow health psychologists and other practitioners to provide evaluations and interventions designed to address psychological sequelae of confirmed medical diagnoses. Because these services are reimbursed on the basis of the relevant medical diagnosis, psychiatric diagnoses may, at times, seem almost beside the point.

In general, when psychiatric diagnosis is a significant component of an evaluation, the examiner should include the relevant questions about history (personal and family, medical and psychiatric), symptomatology (depression, anxiety, etc.), support, coping, and self-care that would be included in any intake interview. For medical patients, it may be helpful to explicitly link medical and psychiatric matters both in introducing the assessment and in posing specific questions. Moreover, it is important to include questions about treatment adherence in evaluation of the patient's self-care behavior. For depressed patients, poor treatment adherence should be explored in particular detail as it may represent a passive form of suicidal behavior.

As with any patient, a detailed substance abuse history also is important. This should include questions about the full range of psychoactive substances (including prescription medication misuse and caffeine intake), preferred type of alcohol (as relevant), mode of ingestion, frequency and duration of use, and the course of past use including any treatment or support group history. Use patterns, previous quit attempts and psychosocial and legal difficulties associated with substance use should also be explored. A symptom checklist such as CAGE (Ewing, 1984) or the Michigan Alcohol Screening Test (MAST; Selzer, 1971) may also be helpful.

However, in working with medical patients, a couple of additional points should be kept in mind. First, patients may, correctly or otherwise, associate their substance use and abuse with their medical problems. Consequently, it is important to carefully frame questions about substance abuse to avoid any implied judgment or criticism of the behavior while eliciting as much information as possible. The tone and wording of these questions are critical, and it may also be helpful to pursue questions about patient health and substance abuse at different points in the interview. An additional challenge comes in obtaining substance abuse histories from patients for whom that history is remote. Patients who stopped smoking, drinking, or drug use 30, 40, or 50 years ago are not uncommon, and such patients may have difficulty recalling the details of their usage or simply regard it as irrelevant. Nevertheless, because even remote substance abuse can impact sleep, cognition, and other factors, it is important to obtain as much information as possible.

Psychologists in medical settings also tend to need more detailed information about sleep quality and the nature of sleep disturbances. When a patient complains of poor sleep, it is important to clarify the frequency and duration of the sleep disturbance and to understand whether the insomnia is characterized by delayed sleep onset, fragmentation of sleep, or early morning awakenings. The potential role of pain and urinary issues in sleep disturbance must also be considered. Furthermore, familiarity with the behavioral signs and symptoms of obstructive sleep apnea (OSA), period limb movement disorder (PLMD), restless leg syndrome (RLS), and narcolepsy also is helpful.

Understanding the cumulative impact of medical factors on a patient's presentation and then parsing apart the relative contribution of psychological and medical factors in that presentation is not a simple task, and there are not absolute rules for making these determinations. In general, care should be taken to not overinterpret vegetative symptoms that are consistent with a patient's medical diagnosis. However, it is equally important to avoid categorizing clinically significant affective distress as a "normal" or "understandable" response to illness, as this may result in under-treatment of depression and anxiety disorders. A couple of safeguards against such errors should be kept in mind particularly when working with hospitalized patients. First, it can be valuable to make multiple observations of a patient's behavior. Variability in energy level over the course of a day is quite common with late afternoon and early evening, and multiple observations of patient behavior allow one to draw firmer diagnostic conclusions about the patient. Similarly, it is quite common for acutely ill patients to respond differently to loved ones than to clinicians, and they also commonly evince different levels of engagement and motivation for different clinicians. In addition to making multiple observations for oneself, it can also be useful to obtain collateral information from those loved ones and other clinicians.

Reaching firm diagnostic conclusions about patient cognition requires a similar balancing act. In acute care settings, a patient may present with marked cognitive impairments that simply reflect a reaction to narcotic medication. On the other hand, a similar degree of confusion in another patient may represent the combined impact of chronic mild cognitive impairment (MCI), a recent stroke and an acute delirium. In primary care, a patient who seems distractible and easily confused may, in fact, be quite functional in the familiarity of his or her home environment. As discussed above, initial assessment of cognition in medical settings ought to include well-made behavioral observations as well as an appropriate screening measure.

Finally, throughout the evaluation process, one must be mindful of the context in which the evaluation occurred. First, when working with hospitalized patients, it is important to remember that the hospital setting typically provides cues that reinforce "sick" behavior as well as drowsiness and fatigue. In other words, the presence and centrality of a bed and pajama-like clothes may magnify a patient's sense of fatigue and debility while reinforcing the view that looking and acting unwell are the expected and appropriate responses. On another level, patients' awareness of and investment in common beliefs about hospitals (bad food, difficult to sleep, difficult to get to the washroom) may lead to self-fulfilling prophecies of poor appetite, insomnia and incontinence. Given these hospital-bound behaviors, it is important to not assume that hospital behavior is a representative sample of a given patient's behavior. Similarly, outpatient medical offices frequently generate a certain amount of discomfort and anxiety (e.g., "white coat hypertension"). Moreover, the structure of such office visits and the perceived authority of treating clinicians may pressure patients to endorse comprehension of medical matters and intention to adhere to medical recommendations that are not genuine. Consequently, it is important that conclusions about anxiety or adherence not be based solely on the behaviors observed in the medical office.

21.7 Dos and Don'ts

Do view the interview as both an assessment and an opportunity for a single-session intervention. It provides the patients with a rare opportunity to explore their illness experience in depth and the therapeutic effects of this should not be underestimated. For example, research has shown that the simple process of sharing one's life narrative with a skilled interviewer is an effective stress reduction method for the health-care setting (Rybarczyk & Bellg, 1996).

Do clearly and frankly describe the purpose of the evaluation. Self-referred patients are relatively rare in medical settings and often times they are not well-informed about the purpose of the assessment. By explaining the referring physician's rationale in requesting the assessment, the examiner helps the patient understand the basis for the content of the evaluation. If the patient is reticent it can be beneficial to have the physician make the introduction or have the psychologist participate in medical rounds initially.

Do allow patients to describe their medical condition(s) in their own words. This approach encourages development of rapport while allowing the examiner to assess a patient's understanding of his or her condition.

Do get comfortable with both technical and lay descriptions of common medical conditions. A fully developed medical vocabulary allows one to have meaningful discussions with patients of all levels of medical knowledge and understanding.

Do consider modesty concerns when conducting inpatient evaluations. A hospitalized patient may not have control over his/her state of (un)dress. Helping patients cover themselves with a blanket or asking a member of nursing staff to reposition the patient may increase their comfort.

Do be aware of one's own responses to illness, mortality, and medical settings. It is important for clinicians to manage their own discomfort with the sights, sounds, and smells of illness in ways that do not impact patient care.

Do consider sensory limitations when conducting an evaluation. Although especially true in working with older adults, it always is a good idea to ask a patient about their hearing and vision and whether they use glasses, hearing aids, or other sensory aids. Sitting closer and speaking slightly louder can be beneficial.

Do be aware of the potential impact of fatigue and pain on a patient's participation and performance. These factors can directly impact effort, motivation, and cognitive performance. Sensitivity to these factors early in an evaluation can help an examiner conduct a more focused, briefer evaluation or decide to conduct the assessment over two or more brief sessions.

Do maximize privacy and minimize disruptions when evaluating inpatients. Although these factors often are beyond a clinician's control, reducing the likelihood of interruptions by entering the appointment in a hospital schedule or placing a "Do Not Disturb" sign on the patient's door can make for a much more cohesive assessment. It is often necessary and desirable to ask visitors to leave the room and to schedule the interview at a time when the roommate is not in the room. If the latter is not possible, pulling the curtain, sitting close to the patient, and speaking in a low voice can be beneficial.

Do expect that patients in medical settings will have different needs and expectations than traditional psychotherapy patients. In medical settings, patients may expect psychologists to take on tasks traditionally accomplished by physicians, nurses, and case managers. It is important to clarify one's role in response to such requests in a way that is clear but not off-putting to the patient. Obviously, it is important to maintain clear professional boundaries with regard to these expectations. However, on occasion, patients will ask for a kind of assistance, such as help arranging transportation to appointments, that while not strictly psychological, can be easily and ethically offered.

Do provide the patient feedback about findings and recommendations. Although routine in traditional settings, providing feedback is sometimes overlooked in medical settings but is an important part of the evaluation process. In some situations, it can be valuable to offer initial impressions at the end of an assessment with more detailed feedback provided when all of the assessment data have been processed.

Do not overstep professional competencies in disseminating medical information. Although it is usually appropriate to reference medical information provided by the patient and general information such as admitting diagnosis, it is important that psychologists in medical settings do not offer patients either new diagnostic and prognostic information or medical explanations that are beyond the competencies covered by their training and licensure.

Do not automatically insist that a patient be seen alone. Although it may be best to politely dismiss spouses, children and loved ones in most circumstances, there certainly are circumstances in which patient fears, cultural expectations, cognitive limitations, and the value of collateral information offered by loved ones outweigh the value of a one-on-one assessment.

Do not overwhelm patients with too many formal measures. It certainly is important to include sufficient measures of psychological and cognitive function to draw clear conclusions and make reliable diagnoses. However, again, it is important to keep in mind patients' energy limitations and potential reluctance to complete such measures. One or two carefully selected, well-designed, measures should be sufficient for most settings. If more extensive testing is indicated, it may be helpful to explain such testing at the end of the interview and to schedule a separate session for completion of the testing.

Do not offer empty reassurance as a means of either advancing the evaluation or encouraging the patient. Genuine, empathic responses to patients' concerns and gentle encouragement are appropriate examiner responses, but vague, overly optimistic statements, such as "everything will be fine," are rarely helpful.

Do not be too lengthy in your documentation of an evaluation. In most situations it is much more effective to be brief and concise. The time constraints of other health professionals, particularly physicians, should be respected and such techniques as using bullet points and focusing on recommendations rather than problem descriptions or causes can serve well. Additionally, staying away from psychological jargon and providing your evaluations in a timely fashion are even more essential in the medical setting.

Do not challenge patients who exhibit denial as a coping mechanism. This may present itself in the interview in a variety of ways, including an apparent lack of knowledge about the prognosis of an illness or lack of appreciation of the significance of one's functional declines. Most patients will come to terms with their illness in due course of time and this self-protective response should be viewed as a healthy way to ease into bad news.

Do not focus exclusively on dysfunction, but rather also focus on coping strengths. Recommendations should be written to reinforce and promote stability of coping strengths (e.g., "Mr. Jones obtains much satisfaction from working in his elaborate garden and an effort should be made to find assistance and adaptive equipment to enable him to continue this important hobby at his home.").

21.8 Summary

As can be seen throughout this chapter, psychologists practicing in the medical setting face a wide range of challenges related to integrating knowledge and understanding of both the psyche and soma, working within large teams, having the ethical challenge of working on behalf of both the medical team and the patient, and working with patients who are not initially receptive to a psychologist and/or naïve to the role of psychologists in medicine. These challenges and complexities make the work experience substantially different than what is found in more traditional mental health settings. However, rather than viewing these issues as negatives, health psychologists almost universally speak of these aspects of the job as part of what makes this specialty work so gratifying. The opportunity to open the door to psychological help for someone who has never sought help before, to empower an individual by enlarging his or her understanding of how their mind and body interrelate, to work amongst dedicated and mutually supportive helpers from different fields, and to develop a useful body of medical knowledge over time are what gets psychologists "hooked" on this unique field. It is an ideal career for those who aspire to have a job that continually challenges you to "think on your feet," that is different every day and that requires a lifetime of learning.

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