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Adolescent Development

# Adolescent Reputat

# Adolescent Reputations and Risk

# **Advancing Responsible Adolescent Development**

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Annemaree Carroll • Stephen Houghton •  
Kevin Durkin • John A. Hattie

# Adolescent Reputations and Risk

Developmental Trajectories to Delinquency

 Springer

Annemaree Carroll  
The University of Queensland  
Brisbane, Australia  
a.carroll@uq.edu.au

Stephen Houghton  
University of Western Australia  
Perth, Australia  
stephen.houghton@uwa.edu.au

Kevin Durkin  
University of Strathclyde  
Glasgow  
United Kingdom  
kevin.durkin@strath.ac.uk

John A. Hattie  
University of Auckland  
New Zealand  
j.hattie@auckland.ac.nz

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*To our parents for their support and wisdom  
throughout our academic adventures and especially to  
Gem, whose strength, resilience, and warmth were  
great inspirations to her children, family, and friends.*

## Preface

Every society experiences problems with youth crime. Indeed, most crime is committed by the young. Typically (though not invariably), offending behavior is time-limited: it occurs during adolescence and declines or disappears thereafter (Moffitt, 1993, Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). The costs of this relatively brief but disturbingly frequent foray are enormous when calculated in terms of lost or damaged property, violated homes, despoiled environments, and physical injuries to victims. The costs are enormous also in terms of the enduring harm to the perpetrators themselves: their young lives can be devastated by dangerous levels of substance use, by engagement in mutually destructive violence, by reckless behavior in the streets or on the roads, by acquiring records that will severely compromise their prospects of ever gaining mainstream employment, and, in some cases, by commitment to institutions where they will be brutalized and recruited to lifelong criminal careers.

Concerns about juvenile delinquency have preoccupied parents, educators, police, youth workers, legal professionals, and policymakers for a long time. In the past 100 years or so, a great deal of research attention has been invested in describing and explaining the origins and courses of delinquency, identifying different types of delinquents, developing and testing preventative measures, and examining the effects of varied treatments or punishments. A range of carefully constructed theories aiming to account for the causes of juvenile offending has been put forward and tested. Considerable information has been amassed about the incidence of different types of crime and their relationship to age.

The theories, the descriptive data, and the research evidence remain controversial, but a lot of progress has been made. We consider some of the progress in this book. Our own work has, of course, been guided and informed by the insights and findings of earlier and contemporaneous researchers; we set our studies in context by beginning with a review of some of the most influential theoretical approaches to the study of delinquency. Our focus is on the motivations of youth at risk and the trajectories they pursue on their routes to delinquent behavior. Following Emler and Reicher (1995), we argue that, for some young people, involvement in delinquent activities is a deliberate choice. We consider why they make that choice, drawing on findings in the literature

and from our own research. We draw also on theoretical work in a different tradition and one hitherto more typically associated with societally endorsed outcomes, such as educational achievement and career development. This is Goal-Setting Theory (Locke & Latham, 1990). Goal-Setting Theory assumes that conscious goals regulate human actions and influence performance levels. We ask what goals delinquents have and how these goals relate to the behavior of these young people.

Working with young people at risk or already engaged in crime brings researchers into a variety of environments and highlights a range of behaviors. We hope that readers who stay with us will learn something about the choices, goals, and values of young people in schools and on the streets, in clinics and in detention centers. Among other issues, we will be considering the motivations and rewards of activities such as antisocial behavior (in and out of school), substance use, volatile inhalant consumption, body-modification practices, and car theft. Most of these are seen, by respectable mainstream adults, as self-evidently undesirable in young people: most are nonetheless very popular among some sectors of the young. This poses obvious challenges to those administering law and order but also to researchers interested in explaining delinquency. An understandable lay account might be that these activities are popular *because* they are condemned or, in some cases, *because* they are designated as the preserve of adults. As we will see, whereas adult disapproval can make a contribution (albeit the opposite to that intended), the truly potent forces are often to be found in the social worlds of young people.

Delinquency is complex and multidetermined. We are not offering to deliver *the* cause or *the* explanation. Other factors are relevant, including personality variables, family histories, adverse environmental circumstances, and the socio-economic climate. We address some of these factors in the research to be reported here. Although there are some typical trajectories of involvement and some recurrent patterns of influence, which will be our principal foci, there are also less frequent routes into crime, such as those of individuals who enter into antisocial behavior very early and continue or intensify the problems (life-course persistent offenders in Moffitt's terms [Moffitt, 1993]), and there are some who pursue enduring engagement in crime with indifference to the social audience. We consider these types of offenders, too. Nevertheless, we will argue that much adolescent risk-taking and offending needs to be understood in relation to the social purposes it serves and the goals that are met by undertaking it.

Virtually all observers of youth crime would like to see it reduced or eliminated. Huge amounts of public resources and the energies of many professionals have been devoted to these aims. The relative inefficacy of many attempts – often despite high quality and delivery by skilled and resourceful practitioners – could lead to pessimistic conclusions. To accept defeat would be to give up on the social and criminologic sciences, to abandon intervention services, to leave the young offenders and potential young offenders to their fates, and to serve the broader society with the distressing conclusion that



“nothing can be done.” Certainly, a lot of careful research and systematic treatments, which we summarize in the penultimate chapter, tell us that doing something is not easy, but they also tell us a lot about which strategies are promising and which factors remain to be addressed. Knee-jerk remedies based in short-term political expediencies are rarely beneficial (Frick, 2001; Gendreau, 1996), but theoretically grounded, intensive systematic programs that are attuned to the contexts and motivations of the young people can and do make a difference. Investigating these contexts and motivations is the principal way in which researchers can contribute to these broader goals.

## Acknowledgments

In 1991, the first author commenced postgraduate studies at the University of Western Australia. In the Christmas season prior to arrival in Perth, the capital city of Western Australia, a terrible tragedy occurred at a suburban intersection of Perth. A 14-year-old juvenile, driving a stolen vehicle at high speeds, smashed into a family car carrying a newborn baby, wife, and husband traveling home from a family gathering. The wife and child were killed instantly. In the United Kingdom, during 1992, two 9-year-old boys coerced a 2-year-old boy out of a shopping center and onto nearby railway tracks. They bludgeoned the defenseless toddler to death and left him on the railway tracks to die. Other tragedies of a similar nature are constantly reported beckoning the questions “Why do young people commit crime?” and “What motivates them to commit acts of delinquency?”

Much of the past 15 years of our collaborative research have been devoted to understanding the motivational determinants for involvement of young people in delinquency. Specifically, we have examined whether some young people are at greater risk than others of becoming involved in crime and whether it is possible to identify those “at risk” before they go on to become chronically involved in criminal activities. We have investigated whether involvement in delinquency is a deliberate choice for some individuals with the development of a nonconforming reputation being a specific goal or whether it may be inherent in the individual as a result of psychopathology (e.g., undiagnosed or diagnosed disorders), interpersonal and affective traits (e.g., callousness, sensation seeking, impulsivity), and/or personal circumstances (e.g., socioeconomic status, family issues, cultural factors) or a combination of all of these factors.

The proposal for this book emanated from a very fruitful and productive research partnership of the four authors and from a vision that placing 15 years of research into a chronological and developmental framework would provide a comprehensive understanding of youth at risk especially those who engage in antisocial and delinquent acts. We are grateful to Roger Levesque, Series Editor, *Advancing Responsible Adolescent Development* (Springer), for embracing our idea, encouraging us in our endeavors, and publishing the final product.

Collaborative research projects of this nature rarely reach fruition without the hard work and dedication of others. This book is no exception. Therefore, we acknowledge and thank the Australian Research Council who provided funding for much of the research conducted and the thousands of adolescents, parents, teachers, and professionals who willingly participated in the various research studies reported throughout the book. We hope that this participation and the outcomes of the research will divert some young people from a life of crime and the development of negative social, educational, and economic outcomes.

The authors have many people to thank for their help in researching and writing this book. In particular, we acknowledge Carol Tan for her extraordinary efforts in proofreading and editing and for compiling more than 500 references in the References section. To Ms. Jenny Foo we express our gratitude for the administrative support provided.

We would also like to take this opportunity to acknowledge the contributions of a number of our students, research assistants, and colleagues whose collaborative efforts over the years underpin the research findings presented in this book. Specifically, we would like to acknowledge the contributions of Julie Bower, Robin Cordin, Francene Hemingway, Umneea Khan, Carol Tan, and Allan Walker who have completed or are currently completing doctoral studies on the broad topics underpinning this book and who have provided research literature and conducted numerous studies under our supervision. Their motivation, commitment, and dedication to the topic of at-risk young people have been extremely noteworthy. Our heartfelt thanks for their collaborative efforts.

We would also like to acknowledge other colleagues who have coauthored articles reported in this book, namely Stephen Allsop, Adrian Ashman, Tony Baglioni, Paul Bramston, Elaine Chapman, Graham Douglas, Shauna Green, Waisam Hoong, Sarah Hopkins, Peta Odgers, and Yasmin Turbett. Chapters 2–8 of the book were based on previously conducted research, with the full reference to the materials being located in the References section (Carroll, Baglioni, Houghton, & Bramston, 1999; Carroll, Durkin, Hattie, & Houghton, 1997; Carroll, Durkin, Houghton, & Hattie, 1996; Carroll et al., 2006; Carroll, Green, Houghton, & Wood, 2003; Carroll, Hattie, Durkin, & Houghton, 2001; Carroll, Houghton, & Baglioni, 2000; Carroll, Houghton, & Odgers, 1998; Carroll, Houghton, Durkin, & Hattie, 2001; Carroll, Houghton, Hattie, & Durkin, 1999; Carroll, Houghton, Khan, & Tan, 2007; Durkin & Houghton, 2000; Hoong, Houghton, & Chapman, 2005; Houghton & Carroll, 1996; Houghton, Carroll, & Odgers, 1998; Houghton, Carroll, Odgers, & Allsop, 1998; Houghton, Carroll, Tan, & Hopkins, 2008; Houghton, Durkin, & Carroll, 1995; Houghton, Durkin, & Turbett, 1995; Houghton, Odgers, & Carroll, 1998; Odgers, Houghton, & Douglas, 1996).

A special vote of thanks is due to the highly competent staff at Springer for their support and professionalism in bringing this book to fruition.

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# Contents

<b>1 At-Risk Youth: Identifying, Charting, and Explaining the Course of Early Involvement with Crime</b> . . . . .	1
Children and Adolescents at Risk . . . . .	2
Factors Placing Young People at Risk . . . . .	3
Factors That Protect Youth at Risk . . . . .	6
Youth at Risk and Involvement in Delinquency . . . . .	7
Theories of Delinquency . . . . .	10
Self-Regulation and Delinquent Involvement . . . . .	15
Concluding Comments . . . . .	16
<b>2 Reputation-Enhancing Goals: The Theory of Deliberate Choice</b> . . . . .	17
The Reputation-Enhancing Goals (REG) Model: An Overview . . . . .	18
Reputation-Enhancement Theory . . . . .	19
Goal-Setting Theory . . . . .	22
Reputation-Enhancing Goals: Research Evidence for the Integrated Model . . . . .	26
Concluding Comments . . . . .	32
<b>3 Measuring Delinquency, Goals, and Reputational Orientations in Young Persons</b> . . . . .	35
General Method . . . . .	35
Adapted Self-Report Delinquency Scale . . . . .	36
The Importance of Goals Scale . . . . .	39
Reputation-Enhancement Scale . . . . .	44
Concluding Comments . . . . .	53
<b>4 Children at Risk: Initiating Goals and Reputations</b> . . . . .	55
Social Reputations and Goals by Deliberate Choice . . . . .	58
Initiating Social Identity Through Goals and Reputation . . . . .	58
Concluding Comments . . . . .	68
<b>5 Adolescents at Risk: Establishing Goals and Reputations</b> . . . . .	71
Using Behavior-Management Systems to Enhance Reputations . . . . .	72

Trajectories of Delinquent Activity Among at-Risk High School Students . . . . . 75

Reputational Profiles of Young Adolescents . . . . . 76

Reputation as Goal-Directed and Deliberate Choice . . . . . 82

Concluding Comments . . . . . 87

**6 Establishing and Maintaining Reputations Through Risk-Taking Behavior . . . . . 89**

    The Severity of the Problem . . . . . 89

    Adolescent Risk Taking and the Reputation-Enhancing Goals Model . . . . . 91

    Substance Use and Reputations . . . . . 92

    Alcohol Use and Reputations . . . . . 94

    Use of Volatile Inhalants and Reputations . . . . . 96

    Body Modifications and Reputations . . . . . 100

    Concluding Comments . . . . . 103

**7 Early-Onset Life-Course Persistent and Late-Onset Adolescent-Limited Offenders: Impulsivity, Peers, and Social Reputations . . . . . 105**

    Early-Onset Life-Course Persistent Offenders and Late-Onset Adolescent-Limited Offenders: Differential Patterns of Delinquency and Impulsivity . . . . . 106

    Impulsivity and Juvenile Delinquency in Early-Onset and Late-Onset Offenders and Nonoffenders . . . . . 107

    Extending Reputation-Enhancement Theory: The Social Reputations of Loners . . . . . 113

    Study: The Delinquency and Reputational Orientations of Loner and Nonloner Delinquents . . . . . 114

    Psychopathic-like Tendencies and Young Persons at Risk . . . . . 116

    Concluding Comments . . . . . 117

**8 Psychopathy in Children and Adolescents and the Fledgling Psychopath Hypothesis . . . . . 119**

    Child and Adolescent Psychopathy: A Brief Overview . . . . . 119

    Psychopathic-like Traits and Psychopathology: The Fledgling Psychopath Hypothesis . . . . . 121

    Study: Testing the Fledgling Psychopath Hypothesis . . . . . 123

    Diagnostic Group Differences in Levels of Psychopathy and Aggression . . . . . 128

    Relationships Between Levels of ADHD/CD Symptomatology, Psychopathy, and Aggression . . . . . 132

    Concluding Comments . . . . . 137

**9 Treatment and Interventions for Young Persons at Risk . . . . . 139**

    Parent Training and Family Interventions . . . . . 139

School-Based Interventions . . . . .	142
Youth Justice Conferencing . . . . .	144
Cognitive-Behavioral Interventions . . . . .	144
Wilderness Programs for Youth at Risk. . . . .	147
Wilderness Boot Camps . . . . .	150
Interactive Multimedia-Based Programs . . . . .	152
Concluding Comments . . . . .	157
<b>10 Developmental Trajectories of Deviancy: Looking Back, Moving Forward.</b> . . . . .	159
Initiating and Establishing Reputations . . . . .	159
Attaining and Maintaining a Social Identity of Choice . . . . .	161
Risk Taking and Social Identity of Choice. . . . .	163
Early-Onset Life-Course Persistent and Late-Onset Adolescent-Limited Offenders . . . . .	166
Psychopathology in Young Persons and Risk . . . . .	167
Treatment and Interventions for Young Persons at Risk. . . . .	169
Concluding Comments . . . . .	170
<b>References</b> . . . . .	173
<b>Index</b> . . . . .	199

# Chapter 1

## At-Risk Youth: Identifying, Charting, and Explaining the Course of Early Involvement with Crime

Some young people are at greater risk than others of becoming involved in crime. Why? Is it possible to identify those “at risk” before they go on to become chronically involved in criminal activities? If we can identify those at risk, can we explain how intrinsic and/or external factors have led to this status? Are there protective factors that, for some, mitigate risk? Once we know who is at risk and why, can we predict the subsequent course of their lives? In this book, we use the term *at-risk youth* in the context of children and adolescents who, as a consequence of their involvement in delinquent activities, place themselves in danger of future negative outcomes. For some of these individuals, such involvement is a deliberate choice, as is the escalation of their at-risk behaviors. For these young persons, involvement is usually in the presence of a peer audience and is a means to attaining a social identity of choice, generally in the form of a nonconforming reputation. Involvement in risky behaviors may be the result of psychopathology (e.g., undiagnosed or diagnosed psychological disorders), interpersonal and affective traits (e.g., callousness, sensation seeking, impulsivity), and/or personal circumstances (e.g., socioeconomic status, family issues, cultural factors) or a combination of all of these factors.

This chapter presents an overview of factors that may place youth at risk or protect them from involvement in risky behaviors and, ultimately, delinquency. With others, we define juvenile delinquency as participation in illegal behavior by a minor who falls under a statutory age limit (Siegel, Welsh, & Senna, 2006). We discuss why young people at risk may become involved in delinquent behavior, and we outline the origins of delinquent behavior by briefly surveying the variety of theories in the area of juvenile delinquency and at-risk youth. The age of onset of delinquency is also examined in the context of developmental trajectories. We conclude with a discussion of self-regulation and delinquency involvement in youth at risk. This latter part of the chapter is inextricably linked with the central theme of our book and the subsequent chapters, which is that in their day-to-day lives, young people make choices in their pursuit of a particular kind of reputation. For some at-risk youth, the reputation is based on an admiration for social deviance and an affiliation with like-minded peers, the outcomes of which tend to be adverse. For others, the same adverse outcomes



apply, but for these young persons at risk, there appears to be no affiliation with a peer group. Finally, there are those individuals who are characterized by psychopathology that involves deficits in self-regulatory processes, which potentially predisposes them to even greater adversity.

Throughout this book, we present extensive research evidence gathered over the past 15 years pertaining to the importance of reputation in the lives of young people. In addition, we integrate this evidence with our research on the self-regulatory processes in goal setting to describe our *Reputation-Enhancing Goals Model*, which explains why the delinquent activities of young people are motivationally determined.

## **Children and Adolescents at Risk**

The term *at risk* has appeared in various contexts even though there is a lack of consensus regarding its origins, meaning, and definition (McWhirter, McWhirter, McWhirter, & McWhirter, 2007). Educators and health professionals have often viewed *at risk* as a diagnostic and discrete category, and this has resulted in objections, criticisms, and argument (Swadener & Lubeck, 1995). According to McWhirter et al. (2007), being at risk occurs along a continuum from minimal risk through remote, high, to imminent risk. Intensity of risk along this continuum is defined in terms of the increasing number and severity of risk factors affecting the young person and the emergence of problem behaviors (Withers & Russell, 2001). These behaviors may range from being socially unacceptable to school authorities (e.g., disrupting the classroom, rejecting teacher support, poor motivation), through activities that are problematic by virtue of the age of the young person (e.g., status offenses such as truancy, running away, substance use), to those that are illegal independent of the offender's age (e.g., assault, vandalism, arson, robbery, rape). Involvement in these behaviors can lead to disciplinary consequences ranging from school suspension and expulsion to legal convictions and incarceration (Lorion, Tolan, & Wahler, 1987).

For some young people, involvement in activities that place them at risk is short-lived. For others, the activities continue over a period of time and may even continue throughout the life span. In many instances, the young person who participates in a specific at-risk activity also becomes involved in others. For example, a young person who is disruptive in the classroom may become truant and while avoiding school may join peers creating minor nuisances in shopping malls, which could result in challenges from security staff, leading in turn to migration to the less stringently policed suburbs where opportunities present for petty theft or vandalism. Academic failure, suspension and expulsion, and early school-leaving are well-known risk factors for juvenile delinquency (Christle, Jolivette, & Nelson, 2005).

During the past two decades, there has been increasing interest and research concerning the concepts of risk and protective factors and the vulnerability and

resilience of individuals. The early identification of these factors is emerging as extremely important for prevention. As we stated earlier, however, for some young people, involvement in at-risk activities is a choice, and the benefits obtained from the peer group are more salient and rewarding to the individual than are the possible punitive outcomes. Hence, some young people may not be amenable to change, thereby demonstrating the power of reputations in impeding many prevention and intervention programs. There is a clear need to understand the risk factors that increase the probability of onset, exacerbation, or maintenance of a problem condition.

## **Factors Placing Young People at Risk**

Myriad factors have been proposed in the voluminous literature on delinquency as associated with or contributing to the development of negative outcomes for young people. Summation of these risk factors typically groups them in five categories; namely, individual, family, peers, school, and community/societal (McWhirter et al., 2007; Siegel et al., 2006; Withers & Russell, 2001). Table 1.1 summarizes the most commonly referenced factors for placing youth at risk, especially of engaging in delinquent behaviors.

*Individual Risk Factors.* Important individual factors that place young people at risk of offending may include physical issues such as premature birth, low birth weight, birth injury, chronic illness, and social competence issues such as insecure attachment, poor problem-solving, lack of empathy, learning difficulties, alienation, and low levels of self-regulation associated with hyperactivity, disruptive behavior, and impulsivity (National Crime Prevention, 1999). Of these individual factors, impulsivity has been demonstrated to be a major contributor to juvenile delinquency, and young persons with low self-control are more likely to react impulsively and engage in criminal behaviors than are those who do not display these characteristics. Vazsonyi, Cleveland, and Wiebe (2006) demonstrated that regardless of community economic status, individuals with low self-control are most likely to engage in criminal activities.

Being male is also an individual risk factor closely related to delinquency, and the relationship between adolescent males and offending has received considerable attention in the criminological literature (see Bottcher, 2001; Mazerolle, 1998; National Crime Prevention, 1999; Ogilvie, 1996; Ogilvie & Lynch, 2002; Ogilvie, Lynch, & Bell, 2000; Steffensmeier & Allan, 1996; West & Zimmerman, 1987; Western, Lynch, & Ogilvie, 2003).

*Family Risk Factors.* Family risk factors, also identified in Table 1.1, include both parental characteristics and types of family environment (National Crime Prevention, 1999; Wasserman et al., 2003). Young people are considered to be at risk, for example, if they were born to teenage mothers, a single parent, a parent or guardian with a history of criminal activities, or parents with psychiatric disorders (especially depression). Family violence, marital discord,

**Table 1.1** Summary of Risk Factors

The individual		
Psychosocial factors	Physical factors	Behavioral factors
<ul style="list-style-type: none"> <li>• Low-self esteem</li> <li>• Low motivation</li> <li>• Poor cognitive development</li> <li>• Low intelligence</li> <li>• Poor social skills</li> <li>• Poor bonding to family</li> <li>• Early antisocial behavior</li> <li>• Psychopathology</li> </ul>	<ul style="list-style-type: none"> <li>• Poor health, illness and disability</li> <li>• Low birth weight</li> <li>• Low level of autonomic and central nervous system arousal</li> <li>• Being male</li> </ul>	<ul style="list-style-type: none"> <li>• Low behavioral inhibition</li> <li>• Hyperactivity</li> <li>• Passivity</li> <li>• Early pregnancy/motherhood</li> <li>• Offending behaviors</li> <li>• Substance use/abuse</li> <li>• Poor academic performance</li> <li>• Low academic aspirations</li> <li>• Early, chronic truancy</li> <li>• Expulsions or suspensions</li> <li>• Social isolation</li> </ul>
The family		
Family structure	Family functioning	Family socioeconomic status
<ul style="list-style-type: none"> <li>• Fragmented, reconstituted family structures</li> <li>• Large family size</li> <li>• Separation from family</li> </ul>	<ul style="list-style-type: none"> <li>• Poor family management practices (e.g., poor parental supervision and control)</li> <li>• Disturbed parent–child relationships</li> <li>• Childhood abuse, neglect, or family violence</li> <li>• Modeling on antisocial parents</li> <li>• High mobility</li> <li>• Family disorganization</li> <li>• Parental psychopathology</li> </ul>	<ul style="list-style-type: none"> <li>• Low parental income</li> <li>• Low parental education</li> <li>• Unemployment</li> </ul>
Peers		
<ul style="list-style-type: none"> <li>• Association with deviant peers</li> <li>• Peer rejection</li> <li>• Association with antisocial adults</li> </ul>		
The school		
School organization	Curriculum	School climate
<ul style="list-style-type: none"> <li>• Rigid organizational policies and practices</li> <li>• Repressive discipline</li> <li>• No help for early leavers and barriers to reentry</li> <li>• Large class size</li> <li>• Large school without substructures</li> </ul>	<ul style="list-style-type: none"> <li>• Unstimulating content</li> <li>• No participation in decision-making</li> <li>• Passive teaching–learning strategies</li> <li>• Competitive exam-dominated assessments</li> </ul>	<ul style="list-style-type: none"> <li>• Unsupportive school culture</li> <li>• Negative teacher–student relationships</li> <li>• Absence of school counsellors</li> <li>• Lack of student participation</li> <li>• Poor school–home relationships</li> <li>• Poor staff professional development</li> </ul>

**Table 1.1** (continued)

Community and societal factors
<ul style="list-style-type: none"> <li>● Extreme poverty</li> <li>● Antisocial community norms</li> <li>● Neighborhood disorganization</li> <li>● High crime rate</li> <li>● Access to weapons</li> <li>● High concentration of delinquent peer groups</li> <li>● Minority ethnic status</li> </ul>

*Sources:* McWhirter et al., 2007; Siegel et al., 2006; Withers & Russell, 2001.

a disorganized family environment, father absence, long-term parental unemployment, a harsh or inconsistent discipline style, rejection of the child, child abuse or neglect, and poverty or economic disadvantage have also been shown to act as risk factors (National Crime Prevention, 1999). Lack of parental supervision is a particularly strong predictor of antisocial behavior in adolescence (Connell, Dishion, Yasui, & Kavanagh 2007). Many young offenders also report having experienced physical, sexual, or emotional abuse (Kiriakidis, 2006; Ralph & Sanders, 2004) with young people who engage in regular violent or property offending crimes being more likely to present with a history of neglect and abuse (AIC, 2006b).

*School Risk Factors.* Negative school experiences can also be a major contributor to antisocial behavior for some young people. Poor student–teacher relationships and a lack of engagement, poor school organization, large class sizes, low student–teacher cooperation, poor rule reinforcement, inadequate behavior management, school failure, and bullying have all been shown to contribute (National Crime Prevention, 1999; Wasserman et al., 2003). A negative school climate is another major contributor to marginalizing and alienating at-risk students (McCrystal, Higgins, & Percy, 2006).

*Peer Risk Factors.* Peer risk factors appear developmentally later in young people’s lives than do other established risk factors, and research in this area indicates that association with deviant peers is related to offending behavior and membership in adolescent gangs (Wasserman et al., 2003). As shown in Table 1.1, association with a deviant peer group can contribute to antisocial behaviors, promote reputation enhancement, and consolidate relationships within this group and hence act as a risk factor (Alvarez & Ollendick, 2003). Once young people are entrenched in an antisocial peer group, efforts to change their behavior can cause them to alienate themselves from their peers who provide support, acceptance, and companionship (McWhirter et al., 2007). On the other hand, of equal concern are those young people who display a lack of connectedness to peers and act out their deviant behavior in isolation (Demuth, 2004; Giordano, Cernkovich, & Pugh, 1986).

*Community Risk Factors.* Neighborhood characteristics of low socioeconomic status (LSES), high percentage of single-parent families, and high transience contribute to greater levels of crime, violence, and delinquent behaviors, as indicated in Table 1.1 (Barnes, Belskey, Broomfield, Melhuish, & National Evaluation of SURE START Research Team, 2006; Vazsonyi et al., 2006).

Although not all young people exposed to risk factors engage in antisocial behaviors, those exposed to a combination or an accumulation of risk factors (as shown in Table 1.1) across their families, schools, peers, and in their communities are at increased risk of becoming involved in offending behavior. Importantly, no single factor is a guarantee that a young person growing up in that context will embark upon a delinquent career. An accumulation of risk factors, and interactions among them, heighten the likelihood of a young person veering into risky or criminal lifestyles.

## **Factors That Protect Youth at Risk**

Given the large list of risk factors, the characteristics of those young people who do not engage in antisocial or criminal behaviors become of particular interest. Researchers (Benard, 1991; Catalano & Hawkins, 1996; McWhirter et al., 2007; Resnick et al., 1997; Siegel et al., 2006; Withers & Russell, 2001) have identified those who do not engage in antisocial behaviors and determined which characteristics make them less vulnerable in the context of environmental hazards (Withers & Russell, 2001). Catalano and Hawkins (1996) described protective factors as those that “enhance the resilience of those exposed to high levels of risk and protect them from undesirable outcomes” (p. 153). Protective factors play a vital role in strengthening young people’s resilience and providing them with the opportunity to withstand hazards that may precipitate involvement in crime. Protective factors are not simply the opposite of those variables identified as risk factors, but rather they form resilience within and external to an individual to withstand risks. Resilience is viewed as the outcome of the operation of protective factors, incorporating personal and external resources or capacities to cope effectively with and overcome adversity (McWhirter et al., 2007).

Resnick et al. (1997) followed 12,118 adolescents recruited from 80 American high schools from Year 7 through to Year 12, in order to identify risk and protective factors associated with health-risk behaviors and the choices made. The investigators found that parent–family connectedness and perceived school connectedness were protective against all health-risk behaviors (e.g., violence, substance use) with the exception of pregnancy.

Benard (1991) identified four key domains associated with resilience: (1) social competence: responsiveness; flexibility; empathy/caring; communication skills; sense of humor; (2) problem-solving skills: critical thinking; ability to

generate alternatives; planning; making a change; (3) autonomy: self-esteem/self-efficacy; internal locus of control; independence; adaptive distancing; (4) sense of purpose and future: goal directedness; achievement; motivation; educational aspirations; healthy expectations; persistence; hopefulness; compelling future; and coherence/meaningfulness.

School-based policies and practices have the potential to mitigate the risks for involvement in juvenile crime. Christle et al. (2005) reported that school-level characteristics such as supportive leadership, dedicated staff, school-wide behavior management, and effective academic instruction can help minimize the risks for delinquency. School climate has also been found to be a critical determinant of delinquency within schools (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005), whereby schools with clarity of rules have lower student delinquency.

Additional individual, family, school, peer, and community factors identified by Benard (1991), McWhirter et al. (2007), Siegel et al. (2006), and Withers and Russell (2001) are presented in Table 1.2.

## **Youth at Risk and Involvement in Delinquency**

Juvenile delinquency theorists and researchers have reported that the most obvious differences in the frequency and severity of juvenile delinquency are with gender, age, and ethnicity (Australian Institute of Criminology, AIC, 2006a; Australian Institute of Health and Welfare, AIHW, 2006; Farrington, 1986; Moffitt, 1993; Siegel et al., 2006). Males are much more likely to commit crimes than are females. Siegel et al. (2006) reported that the male-to-female ratio for serious violent crime among juveniles in the United States is approximately 4 to 1. Interestingly, Siegel et al. reported that the numbers of female delinquents have been increasing faster than those for males: arrests of male delinquents having decreased by approximately 22% compared with females increasing by approximately 12%. The authors attribute some of this change to females self-reporting greater levels of delinquency and males underreporting their involvement. Similar statistics are evident in Australia with there being a slight increase in the percentage of juvenile offenders who are female, from 21% in 1995–1996 to 23% in 2003–2004, whereas the rates of male juvenile offending have been dropping by 27% since 1995, with a 19% drop in the past 3 years (AIC, 2006a). However, there were almost five times as many males as females under juvenile justice supervision in Australia, with males being supervised at a rate of 7.4 per 1000 compared with females at 1.6 per 1000 (AIHW, 2006).

In another Australian study, Hay (2000) investigated gender specific self-concept profiles of adolescents whose persistent behavior problems led to suspension from school. The resultant profiles suggested that boys' antisocial behaviors were associated with a striving for masculine self-image, whereas girls' antisocial behaviors resulted more because of rejection by female peers

Table 1.2 Summary of Protective Factors

	Family	Peer	School	Community
Individual				
High intelligence	Cohesion	Activity with prosocial peers	Involvement in school and belief in the school values	External social support
Abstract thinking	Prosocial family bonding	Belief in prosocial peer values	School connectedness	Social cohesion
Forethought	Values	Bonding to prosocial peers	Availability of counselling teachers	Involvement with prosocial community members
High self-esteem	Connectedness to parents		Caring and supportive teachers	Availability of resources
Social competence	Emotional support from trusted others		High expectations	
Problem-solving skills	Affectionate		Clear rules	
Autonomy and sense of purpose	Prosocial family norms and rules		Student involvement in activities	
	High expectations		Opportunities to participate	

Sources: Benard, 1991; Catalano & Hawkins, 1996; McWhirter et al., 2007; Resnick et al., 1997; Siegel et al., 2006; Withers & Russell, 2001.

and subsequent psychological stress. Therefore, it appears that the increase in female offending rates in Australia may be in part accounted for by a parallel increase in the types of offending activities engaged in by female offenders along with greater social marginalization, which results in greater allegiance to delinquent peers.

Frequency of crimes increases with age through to late adolescence and then begins to decline, with these age-related changes being similar for both males and females (AIC, 2006a; AIHW, 2006; Taylor, 2006). The majority of juvenile offenders are adolescent-limited (late-onset) (Moffitt, 1993), and the number of late-onset juvenile offenders continues to constitute the large majority of 10- to 17-year-old individuals in detention (83% = 15- to 17-year-old individuals) (Taylor, 2006). Overall, approximately 95% of offenders are classified in the adolescent-limited subgroup; not only does their offending begin later in life, but it also occurs less frequently and tends to be less violent (Carroll et al., 2006). The remaining 5% of offenders contribute disproportionately to crime statistics. Henry, Caspi, Moffitt, and Silva (1996) found that 50% to 60% of all crimes committed in the United States can be attributed to approximately 5% of offenders, most of whom have histories of early emerging problem behavior; these young people are at risk of longer term criminal careers.

*Psychopathology and Involvement in Delinquency.* Earlier in this chapter, we alluded to psychopathology in juvenile offenders as placing them at greater risk of adversity, and in this section we elaborate on this. Abrantes, Hoffmann, and Anton (2005) reported that a significant number of juvenile delinquents meet the criteria for one or more psychiatric disorders, the most prevalent being conduct disorder; substance use disorders; attention-deficit/hyperactivity disorder (ADHD); psychosis; and affective disorders (e.g., depression). In addition, a significant number of juvenile offenders have histories of physical and sexual abuse (Abrantes et al., 2005; Pullmann et al., 2006).

The rate of youth with mental health needs is disproportionately high in juvenile justice, with figures suggesting that the prevalence is double that of the general population (Pullmann et al., 2006). Studies of mood disorders among juvenile offenders have found prevalence rates of between 17% and 78%, with slightly higher rates for females than for males (Ryan & Redding, 2004). Research also suggests that conduct disorder emerges earlier in males with depression (Riggs, Baker, Mikulich, Young, & Crowley, 1995). Ryan and Redding (2004) considered that:

mood disorders may contribute to or exacerbate delinquent and disruptive behaviors in a variety of ways . . . mania may lead to risk-taking and sensation-seeking behaviors, and the hopelessness and lack of future orientation that can accompany depression may cause a juvenile who engages in these behaviors to discount future consequences.  
(p. 1398)

Chitsabesan et al. (2006) investigated the mental health and psychosocial needs of a nationally representative sample of juvenile offenders in England and Wales and found that almost 1 in 5 young people had significant depressive



symptoms compared with around 1 in 10 in the general population (Substance Abuse and Mental Health Services Administration Report, 2007). One in 10 also reported anxiety or posttraumatic stress symptoms compared with around 1 in 6 in the general population (Substance Abuse and Mental Health Services Administration Report, 2007). Additionally, self-harm within the month prior to data collection was reported by almost 1 in 10 young offenders (Chitsabesan et al., 2006). Chitsabesan et al. (2006) also reported that one in five young offenders had a learning disability ( $IQ < 70$ ), with almost three quarters recording a reading age ( $M = 11.3$  years) significantly below their chronological age (15.7 years). Cognitive verbal deficits, including problems with verbal reasoning and language manipulation, have been recognized as a strong risk factor for both developing and continuing to display antisocial behavior (Bryan, Freer, & Furlong, 2007; Moffitt, 1990; Vermeiren, Schwab-Stone, Ruchkin, De Clippele, & Deboutte, 2002).

## Theories of Delinquency

Several theoretical models have been developed by researchers in the fields of criminology, psychology, and sociology in an attempt to explain delinquent behavior. Arguably, the most dominant are cultural deviance theories (Colvin & Pauly, 1983; Dussich, 1989; Merton, 1938, 1957; Miller, 1958; Sutherland & Cressey, 1970), strain theories (Cloward & Ohlin, 1960; Cohen, 1955), control theories (Hirschi, 1969), social control theories (Gottfredson & Hirschi, 1986, 1990), social learning theories (Bandura, 1977, 1986), rational choice theory (Cornish, 1993; Cornish & Clarke, 1986; Kiser & Hechter, 1998), symbolic interactionist theory (Matsueda & Heimer, 1997), and developmental theories of delinquency (Moffitt, 1993; Patterson, Reid, & Dishion, 1998). Each will now be examined, albeit briefly.

*Cultural Deviance Theories* (Colvin & Pauly, 1983; Dussich, 1989; Merton, 1938, 1957; Miller, 1958; Sutherland & Cressey, 1970) explain delinquency by assuming that outside mainstream society, subcultures exist that adhere to criminal values and condone criminal behavior. These subcultures have been found particularly in male, lower class, urban adolescents who commit delinquent acts to conform to the standards of the delinquent subculture (Cohen, 1955). The concept of one static, predominant delinquent subculture has been questioned, however (Young & Matthews, 1992). Most contemporary cultural deviance theorists acknowledge the diversity of youth subcultures, and delinquents may be associated with different groups among these.

*Classic Strain Theories* explain delinquency as arising from the inability of adolescents to achieve specific goals, such as economic success (Cloward & Ohlin, 1960) and middle-class status (Cohen, 1955), through legitimate channels. These early theorists have been criticized (a) for predicting that delinquency is a problem predominately inherent to the lower classes and

(b) for their inability to explain why most delinquents abandon crime in late adolescence (Agnew, 1985).

A *Revised Strain Theory* of delinquency published by Agnew (1985) suggested that adolescents might not possess adequate legal means for dealing with problems influencing their environments (such as within the family or in school), where those environments are painful and aversive. Pain-avoidance behavior may become blocked in such adolescents, causing frustration, and perhaps leading them to illegal escape attempts or anger-based delinquency. Revised strain theory, according to Agnew (1985), proposes that delinquency can be manifest in direct or indirect reactions to these frustrations. For example, school is experienced as aversive and one response would be to leave the situation, leading to truancy, a direct form of delinquency because it is regarded as illegitimate or illegal by the authorities. If the individual is unable to escape, then he or she might experience negative emotional reactions, such as anger, which is then expressed in some antisocial actions such as vandalism or peer aggression. In other words, direct delinquency refers to actual illegal escape attempts, whereas indirect delinquency refers to criminal behavior that is the result of anger at being unable to remove oneself from the aversive environment. These theories, however, do not address individual differences that exist within social classes and do not account for gender differences (Emler, 1984; Schur, 1973).

*Social Control Theories* assume that delinquent acts result when an individual's bond to society is weak or broken (Hirschi, 1969). According to Hirschi, conformity toward conventional goals is dependent upon the bonds individuals have to society. These bonds include attachment to people or institutions (e.g., parents, teachers, friends in the form of communication and internalized norms); commitment to conventional lines of action; involvement in conventional, noncriminal activities (e.g., school performance, leisure and sporting pursuits, family activities); and belief in the moral validity of norms. Adherence to the bonds of society entails that individuals will comply with legal norms; absence or breakdown of the bonds is likely to result in transgressions (Junger-Tas, 1992). In social control theory (Gottfredson & Hirschi, 1993), people weigh the costs and benefits of legal and illegal courses of action, ultimately choosing the behavior that they believe will most likely maximize their pleasure (Hirschi, 1969). Agnew (1991) proposed that a suitably predisposed adolescent is likely to engage in crime to the extent that the benefits are perceived to outweigh the costs. Such benefits may include economic gain, fun, or excitement.

Such theories have, however, been criticized for not taking into account individual differences in the personality of parental child-rearing practices (Emler, 1990). Indeed, Emler (1984) and Carroll and colleagues (Carroll et al., 2003; Carroll, Houghton, Hattie, & Durkin, 2001; Carroll, Houghton, et al., 1999; Houghton et al., 2008) have argued that whereas delinquency may evolve from weak societal bonds, individuals may also positively choose to become delinquents.

*Social Learning Theories* (Akers 1985, 1998; Bandura, 1973, 1986) suggest that juveniles learn to engage in delinquency from others who reinforce their delinquent behavior, teach them beliefs that are favorable to delinquency, and serve as delinquent models. Bandura (1977, 1986) claims that individuals learn how to perform behaviors through observational learning across four phases: attention to the model's behavior; retention of information at the cognitive level; reproduction of the observed behavior; and motivation (determining whether the observed behavior will be reproduced). Reproduction, of course, is more likely to occur if the behaviors are reinforced rather than punished (Bandura, 1986) and behaviors to reproduce are selected according to goals and situational demands. That is, if the model is someone regarded as successful or of high status, the modeling of the observed behavior will be enhanced (Hollin, 1990).

Through observational learning that takes place primarily in the family, peer group, and through the media, young people may learn either conforming or deviant behavior. Consequently, juveniles may come to perceive delinquency as something that is desirable or at least justifiable in certain situations. Not surprisingly then, this perspective leads to the prediction that family, peer groups, neighborhoods, and school communities have a significant impact on what juveniles learn. One limitation of this approach is that it emphasizes environmental impact on the individual but says less about how or why individuals elect to engage with particular environments or choose particular role models. Another is that it does not explain why observational learning of crime should be particularly potent during adolescence.

In *Rational Choice Theory* (Cornish, 1993; Cornish & Clarke, 1986; Kiser & Hechter, 1998), crime is viewed as outcomes of choices that are influenced by a rational consideration of the efforts, rewards, and costs involved in alternative courses of action. The roles of self-interest and rationality are maximized (Boudon, 1998), which is consistent with the view that cooperation is maintained by rational individuals who have the expectation of reciprocity. However, this cooperation is not stable, and deviant behavior overthrows cooperation (Kondo, 1990). One criticism of this theory is that the emphasis is always placed on the offender rather than the context or situation of the criminal event.

The importance of symbolic meanings to the unfolding of role transitions across the life course is highlighted in *Symbolic Interactionist Theory* (Matsueda & Heimer, 1997). Symbolic interactionists view transactions between two or more individuals as the important mechanism by which they, the individuals, influence each other through role-taking. Projecting oneself into the role of other persons and appraising from their standpoint the situation, oneself in the situation, and possible lines of action (Matsueda, 1992) are all part of the process. In the context of delinquency, individuals confronted with delinquent behavior as a possible line of action take each other's roles through verbal and nonverbal communication, fitting their lines of action together into joint delinquent behavior (Mead, 1934). This dynamic process of reciprocal role-taking

where one person initiates action, and another person takes the role of the other and responds, then the first person reacts to the response, builds the transaction. A new goal is initiated or the transaction fades once the jointly developed goal is reached. Limitations of this theory are that it does not account very well for age-related changes in criminal activity and that it does not explain why some individuals find themselves confronted with delinquent options whereas others do not.

*Developmental Theories of Delinquency* focus on two themes: (1) the timing of delinquency initiation and (2) the progression along developmental pathways of involvement in increasingly serious delinquent behaviors (Tolan, Gorman-Smith, & Loeber, 2000). The developmental theories of delinquency offer a dimension lacking in some other prominent theories because they explain patterns of offending over the course of an individual's life. They also address why some individuals are more likely to engage in delinquency than are others and why some groups have higher rates of delinquency than do others.

According to developmental researchers (Moffitt, 1993; Patterson et al., 1998), trajectories, pathways, and transitions should be incorporated into theories of crime. As highlighted earlier, Moffitt (1993) proposed that during adolescence, delinquent behavior is carried out by two distinct groups: adolescent-limited offenders and life-course persistent offenders. A third group known as abstainers, that is those with no more than one recorded antisocial problem from age 5 through to 18 years, was also identified. To categorize the disproportionate number of adolescent-limited offenders compared with life-course persistent offenders, Moffitt (1993) developed a *Developmental Taxonomy*. Within this taxonomy, the critical distinction between these two groups of offenders is grounded in different trajectories. That is, antisocial behavior begins early in life and is *life-course persistent*, as against antisocial behavior beginning in adolescence and likely remaining limited to this period (Moffitt, 1993). Moffitt has provided extensive evidence in support of her taxonomy.

Adolescent-limited offenders begin engaging in delinquent acts to mimic the behaviors of their life-course persistent peers, because these behaviors allow access to desirable resources and mature status, which entail power and privilege (Moffitt, Caspi, Harrington, & Milne, 2002; Moffitt & Caspi, 2001). Desistance occurs when the costs of delinquency become higher than the benefits of more prosocial actions. With reference to adolescent-limited offenders, these individuals engage in delinquent behaviors only during adolescence, and offending develops as a result of social mimicry and peer influence (Fergusson, Horwood, & Nagin, 2000).

Life-course persistent offenders, on the other hand, may develop antisocial and aggressive behaviors caused by neuropathologic impairments sustained during prenatal, perinatal, and/or early postnatal phases, sometimes in combination with family and neighborhood adversity. These neuropsychological problems are thought to result in two main types of neuropsychological deficits in childhood: deficits in verbal functioning and deficits in executive functioning

(Moffitt, 1990; Moffitt & Henry, 1989; Moffitt & Silva, 1988). Research by Moffitt and colleagues found that below-average test scores on language measures and measures of self-control (such as inattention, overactivity, and impulsivity) were linked with early antisocial behavior and its persistence into adolescence (Moffitt, 1990; Moffitt & Henry, 1989; Moffitt & Silva, 1988). Life-course persistent offenders also consist of a second distinct group of early-onset offending individuals with no neurodevelopmental pathology. These offenders are often termed *psychopaths* in adult life and pursue a lifelong evolutionary adaptive strategy of defection, manipulation, dominance, coercion, and aggression (Moffitt, 1993).

Difficulties in early temperament (Caspi, Henry, McGee, Moffitt, & Silva, 1995) and impulse control in situations that contain strong motivational inducements (White et al., 1994) have been strongly associated with externalizing behaviors and delinquency in preadolescence and adolescence. Personality research has also shown that impulsivity, poor self-control, opportunism, and sensation seeking are strong predictors of delinquency, with excitement seeking (a facet of extraversion), specifically related to vandalism and theft in adolescents (Heaven, 1996). There is also an association between childhood onset of delinquent behavior and severe and chronic delinquency that persists into adulthood (Weiner, 1992).

Moffitt's (1993) developmental taxonomy of antisocial behavior has been important for classifying participants for research, assisting in the identification of causal variables, and guiding the timing and strategies of interventions for delinquents. The majority of research has focused on testing the hypotheses regarding the etiology of life-course persistent offenders rather than examining the theory's distinct etiology of adolescent-limited offenders. A small number of studies, however, have investigated pathways of adolescent-limited offenders. Moffitt and Caspi (2001) investigated whether desires for autonomy promoted adolescent-onset offending. It was found that the offenses committed by adolescent-limited delinquents were primarily rebellious, which accounted for the interaction between maturational timing and aspects of peer activities that were related to personal autonomy. Moffitt explains this as an adaptive response to the frustrating experience of the maturity gap. That is, although these young people are biologically capable of and interested in adult behaviors (e.g., autonomous decision making), society denies them such privileges and so a solution is found by imitating the behavior of antisocial peers – peers who appear to have surmounted the maturity gap with behavior that symbolizes independence and autonomy such as drinking, smoking, and other risk-taking behaviors (Piquero, Brezina, & Turner, 2005).

It is important to note at this juncture that whereas many of the theories described above allude to the existence of and possible importance of social identities and reputations to individuals, none specifically address their importance in the context of young persons at risk of delinquency. Furthermore, that young people make choices through which to develop their reputations requires self-regulated goal directedness. Prior to presenting our *Reputation-Enhancing*

*Goals Model* as an explanation of why young people choose to become involved in delinquent activities (see Chapter 2), we briefly examine self-regulation and delinquency. The inability to regulate self-control has been found to be an important determinant of delinquent behavior (Farrington & West, 1990; Gottfredson & Hirschi, 1990; Kindlon, Mezzacappa, & Earls, 1995; Vitacco & Rogers, 2001; White et al., 1994).

## **Self-Regulation and Delinquent Involvement**

Much research has been undertaken into the role of self-control or self-regulation in the development of human behavior (Bandura, 1977, 1997; Benda, 2005; Eisenberg & Fabes, 1992; Robbins & Bryan, 2004; Zimmerman, 2000). Self-regulation refers to the exercise of control over oneself, particularly in regard to bringing the self into line with preferred standards (Vohs & Baumeister, 2004). Bandura (1986, 1997) proposed a social cognitive perspective on self-regulation incorporating an interaction of personal, behavioral, and environmental processes. This perspective suggests self-regulation is cyclical due to feedback from prior performances being used to make changes in current endeavors.

Zimmerman (2000) extended this description of possibly important processes to suggest that “self-regulation refers to self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals” (p. 14). Individual differences in self-regulation have previously been linked to antisocial behavior (Eisenberg & Fabes, 1992), and studies have demonstrated that deficiencies in the capacity to modulate one’s attention, affect, and behavior are associated with undercontrolled behavior problems. Studies of juvenile delinquency have implicated characteristics such as impulsivity (White et al., 1994) and self-control (Gottfredson & Hirschi, 1990) as risk factors for adolescent antisocial behavior. Henry et al. (1996) found that a lack of control assessed at ages 3 and 5 is predictive of convictions for violent offenses in late adolescence.

Research on self-regulatory strategies has suggested that adolescent at-risk behaviors are related to an inability to self-regulate cognitions, emotions, and behaviors (Gottfredson & Hirschi, 1990; Pennington & Welsh, 1995). Difficulties in regulating attention, for example, have been associated with antisocial behavior and academic problems (Eisenberg et al., 1997). The inability to regulate negative emotions has also been linked to disruptive and aggressive behavior with irritability, difficult temperament, and negative emotional reactivity being common among those manifesting these problems (Rothbart & Bates, 1998).

Of the self-regulatory processes shown to be powerful mediators of behavior, inadequate self-control is a major determinant of delinquent behavior (Wilson & Herrnstein, 1985). Impulsivity at an early stage in life has been found to predict early onset of stable, highly delinquent behavior during adolescence and adulthood (Farrington, 1990). Impulsivity serves to maintain

antisocial behavior across the life span because of the interplay of person–environment interactions. Another feature of self-regulation is the capacity to maintain an appropriate problem-solving set for goal attainment. The range of competencies needed for this include selective inhibition of responses, planning, prioritizing, and integrating time and space (Pennington & Welsh, 1995). In some individuals, it appears that some of the self-regulated strategies such as planning, foresight, and manipulation may be quite developed to the extent that it allows them to commit delinquent acts without remorse or empathy (Salekin, 2006). Hence, whereas the literature supports the claim that individuals who become involved in delinquency may have a deficient self-regulatory system, there are other findings to support the notion that there are young people who commit delinquency through premeditated and callous intent. There are other young people who may not be premeditated and callous, yet have developed self-regulatory capacities to deliberately set goals to engage in delinquent activities for the development of a social, nonconforming reputation.

## **Concluding Comments**

This chapter has briefly surveyed the construct of *at risk* and the factors that predispose young persons to this status or protect them from falling into it. A range of theories pertaining to delinquency was also covered, and it was pointed out that whereas all made significant contributions to explaining the involvement of young persons in delinquent activities, none specifically accounted for why some young people deliberately choose to become involved in at-risk and criminal-related activities in order to pursue and subsequently establish a nonconforming reputation. Moreover, to achieve the desired reputation, must an individual participate in these criminal-related activities when there is an audience present? In the next chapter, an alternative explanation that integrates goal-setting and reputation-enhancement theories is presented, which we believe addresses this question as to why some individuals deliberately choose to indulge in delinquent behaviors.

## Chapter 2

# Reputation-Enhancing Goals: The Theory of Deliberate Choice

Although the delinquency research is highly informative about the developmental psychopathology of antisocial behavior and the individual differences that contribute to delinquent behavior, few of the theories developed address the motivational determinants for involvement in crime (Emler & Reicher, 1995). Self-presentation theory (Baumeister, Hutton, & Tice, 1989; Goffman, 1959; Leary, & Kowalski, 1990; Schlenker & Weigold, 1990; Tice, 1992) proposes that individuals are the architects of their own presentations: that is, the need to present a desired self-image to others is activated by the presence of others (Geen, 1995; Goffman, 1959; Trower, Gilbert, & Sherling, 1990). The degree to which people are motivated to regulate impressions of themselves to others varies greatly across situations and depends on their goals (Leary, 1993; Rhodewald, 1998). Moreover, with different audiences, people use different self-presentation strategies (Tice, Butler, Muraven, & Stillwell, 1995). Self-presentation theorists emphasize that self-presentation is the goal of all public action and that public action is potent because it commits individuals to future actions consistent with a desired self-presentation (Goffman, 1959; Schlenker, 1980). Actions are managed in an attempt to induce others to credit us with particular qualities of character. Reputation-Enhancement Theory (Emler & Reicher, 1995) extends Goffman (1959) by taking into account the likely nature of the audience.

The theoretical model to be advanced in this book presupposes that many young persons become involved in delinquency to meet personal autonomy goals and to enhance their reputations with peers. The current review describes this theoretical model, entitled *Reputation-Enhancing Goals* (REG), which provides an alternative analysis of delinquency using a social-psychological approach. It does this by integrating elements of Reputation-Enhancement Theory and Goal-Setting Theory. Emler (1984) and Emler and Reicher (1995) proposed Reputation-Enhancement Theory as an account of juvenile delinquents' motivations. Reputation-Enhancement Theory posits that individuals choose a particular self-image they wish to promote before an audience of their peers, and this audience then provides feedback so that the individual develops and maintains this social identity within a community. Emler and Reicher

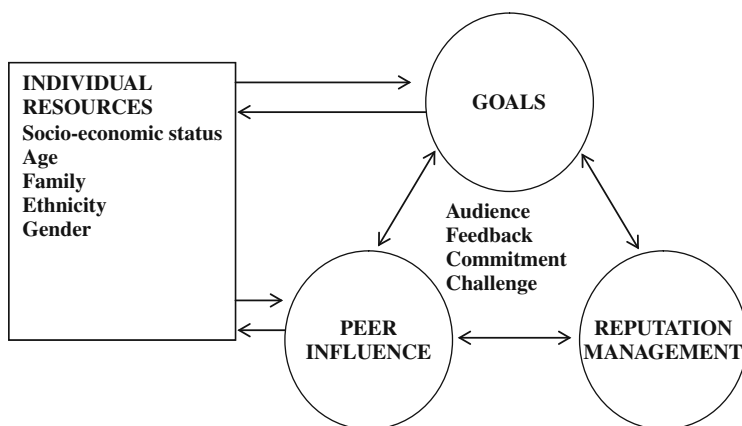


(1995) proposed that delinquency was motivated by social goals and purposeful reputation-enhancing strategies. An account of the nature of these goals and the relationships between goals and behavioral choices, however, remains to be detailed. For example, how do delinquents formulate their goals? Are they aware of them, and do they monitor their performance in relation to them? Do they adjust their behavior as goals are met? Goal setting has been studied extensively with respect to other areas of human behavior, including educational and career attainment. In this chapter, we apply one of the most productive theories of goal setting, namely that of Locke and Latham (1990), to the study of motivations of delinquents. Goal-Setting Theory assumes that conscious goals regulate human actions and influence performance levels.

In this chapter, we first present an overview of the *Reputation-Enhancing Goals Model*, which argues that adolescents who become delinquent deliberately choose nonconforming social goals on which to base their reputations. We show how the model derives from earlier theories of reputation enhancement and goal setting. We then review each of these two theories and their application to delinquency and at-risk behavior. Then, we review empirical research supporting the integrated model.

## The Reputation-Enhancing Goals (REG) Model: An Overview

The integrated model, which is shown in Fig. 2.1, is based on the premise that adolescents have access to and experience many resources and opportunities that can influence the types of goals they choose. Socioeconomic status, age, family, ethnicity, and gender are examples of these resources. There are two major types of goals based on academic and/or social goals, the latter of which can be further divided into conforming or nonconforming social goals. Critical



**Fig. 2.1** The integrated model of reputation-enhancing goals

in the orientation, development, and management of adolescents' peer reputations is the choice of these academic, conforming social, and/or nonconforming social goals. These reputations are deliberately chosen and promoted, publicly displayed and maintained, and are more likely to be long-term than short-term oriented. *Goal* is a generic concept encompassing intention, task, purpose, aim, and objectives. A *reputation* is the general estimation in which a person is held by some community. A *reputation-enhancement goal* is the desire to achieve and maintain a particular social identity. Self-identity and self-presentation are regulated by adolescents with the goal that others will perceive them in a certain desired manner. Those adolescents most likely to become delinquents choose nonconforming social goals on which to base their reputations.

The feedback received from peers is a powerful influence that informs both goal choice and peer reputation. Peers often generate and facilitate expressions of shared behavioral inclinations (Emler, 1984; Emler & Reicher, 1995). Like their nondelinquent peers, delinquent adolescents have much commitment to build publicly and maintain a reputation. Following findings in management research (Locke & Latham, 1990), we argue that the more specific the goals, the higher the probability of feedback. As a consequence, to build and maintain their reputation, many delinquents select and accomplish very specific and challenging goals, which for reasons elaborated below happen to be nonconforming.

*At-risk* adolescents can be distinguished from delinquents because they are in an intermediate transitional state and the setting of and commitment to alternative goals (i.e., delinquency goals) are becoming more attractive to them. Individuals set goals to achieve a particular reputation, however, irrespective of whether they are delinquent or at risk of becoming delinquent. To explain the motivational and social determinants of delinquent behavior, the *Reputation-Enhancing Goals Model* integrates Reputation-Enhancement Theory and Goal-Setting Theory. A detailed account of these theories is now provided prior to presenting the research evidence in support of the integrated model.

## **Reputation-Enhancement Theory**

According to Reputation-Enhancement Theory, delinquency is viewed as self-presentation that establishes a rational and nonpathologic social identity (see Emler & Reicher, 1995, for a full account). Reputation-Enhancement Theory posits that individuals carefully choose the image or social identity they wish to present and promote in their community and go to great lengths to both develop and maintain this image (Emler, 1984; Emler & Reicher, 1995). Reputations, therefore, are collective phenomena and products of social processes, not just the impressions that individuals hold of themselves (Emler, 1990). To have a reputation, people must be connected to others in a relatively stable community of mutually acquainted and conversing individuals (Hopkins & Emler, 1990).

Individuals communicate their social identities through intentional, visible behavior in order to persuade others that they belong to a particular social category (Emler, 1990). An integral argument of Reputation-Enhancement Theory is that individuals have public reputations and that this is the social goal of their conduct (Emler, 1990). Social visibility is sustained by directly witnessing the acts of others, self-disclosure, gossip, and exchange of information (Emler, 1984). That is, individuals are both students of reputations and promoters of their own reputations. The promotional aspect is particularly important because of the credit it attributes to individuals within their social community (Emler, 1990; Emler & Reicher, 2005). It is this credit that strongly influences individuals' abilities to attain goals and secure material benefits (Emler, 1990).

The selection of one specific kind of social identity rather than another is how individuals generally choose to be defined (Emler, 1984). Law-abiding, athletic, academic, or delinquent are examples of social identities with which adolescents may choose to define themselves. The choice to base reputations on both academic and social endeavors can also be culturally influenced. Steele (1992) and Steele and Aronson (1995), for example, have argued that whenever African-American students perform an explicitly scholastic or intellectual task, they face the threat of being judged by a negative societal stereotype about their group's intellectual ability and competence. Such a reputation influences the academic functioning of these students, particularly during standardized testing. According to Steele (1992), this reputation "may have the further effect of pressuring these students to protectively disidentify with achievement in school" (p. 797), such that school achievement is neither a basis of self-evaluation nor a personal identity. Steele also suggested that the various effects of this cultural reputation (e.g., spending more time answering fewer test items) can reinforce the reputation. As performance falters because of the reputation, and as the reputation frames that faltering as a sign of a group-based inferiority, the individual's expectation about his or her ability and performance drops. This cycle then undermines motivation, effort, and self-efficacy (see also Osborne, 1995, 1997; Osborne, Major, & Crocker, 1992; Hansford & Hattie, 1982). This negative academic reputation is particularly powerful among minority ethnic males in some societies (e.g., the United States; cf. Osborne, 1997).

Involvement in delinquency is a prime example of the acquisition of social visibility through the presence of a regular audience that provides feedback (e.g., Becker, 1963; Emler, 1983, 1984, 1990; Emler & Reicher, 2005; Goffman, 1972; Gold & Petronio, 1980; West & Farrington, 1977). If they wish to claim a delinquent identity, adolescents must be seen to break rules and regulations and become deliberately nonconforming (Hopkins & Emler, 1990). When delinquents accept risks and keep their composure in the face of dangerous, challenging, and daring feats, public proof of character is provided (Goffman, 1972). A delinquent identity requires an audience who shares a subculture (Gold & Petronio, 1980), and an important source of visibility is that delinquent activities are not committed alone but in company (Reicher & Emler, 1986).

Without the social support of a peer group, a delinquent or nondelinquent reputation is hard to sustain (Reicher & Emler, 1986). For the nondelinquent, social support and feedback is forthcoming from families and teachers (Hopkins & Emler, 1990). Delinquents, on the other hand, often do not or cannot use parents or teachers to sustain their reputations, and thus they seek alternative audiences such as peers (Emler, 1984; Farrington & West, 1990; Junger-Tas, 1992).

A reputation for antisocial behavior is a deliberate choice by some adolescents because delinquent action is not only a means of creating a certain (tough) reputation among outsiders, but it also provides the condition for group membership (see Emler & Reicher, 1995, for a review). According to Reicher and Emler (1986), the visibility of chronic rule-breakers' conduct or the damage it will do to their reputations is not miscalculated; rather, they foster this reputation. Studies of young people who are at risk or already involved in illegal activities (such as conflict with teachers, aggression, damage to property, dangerous use of drugs) demonstrate consistently that gaining or consolidating peer status is a powerful motivation (Campbell, 1993; Carroll, 1994; Carroll et al., 2003; Carroll, Houghton, et al., 1998, 1999; Houghton & Carroll, 1996; Houghton, Odgers, & Carroll, 1998; Odgers et al., 1996; Goldstein, 1994; Lagree & Fai, 1989).

According to Reputation-Enhancement Theory, the movement of individuals beyond the supervision and protection of their homes, from small to big schools, and from parent to peer relationships help to explain why there is a steep rise in delinquency for many at the onset of adolescence and a gradual decline at early adulthood (Emler, 1984). During the high school years, there is an increased and routine contact with like-minded peers, and it is this contact that provides the necessary audience by which to enhance a reputation. Reicher and Emler (1986) point out that delinquents are extremely active and employ many positive strategies of offending to achieve status and enhance their reputations in early to mid-adolescence, whereas in late adolescence, offending is seen more as maintaining credit or status within the group. In fact, individuals' places in the group are never stable because they are either being sought after by others or else continuously in the process of being reconfirmed (Reicher & Emler, 1986). Choice of reputation is also affected by gender. For example, males admit to a greater number of delinquent acts and have a more negative attitude to authority. Carroll, Houghton, Khan, and Tan (2007), however, found that female delinquents have negative attitudes toward authority similar to their male counterparts, but a reason why they are thought to commit fewer delinquent acts is because they do so in a covert manner and do not readily admit to committing these acts as do males. According to females, such concealment is a means of protecting their reputations.

In sum, according to Reputation-Enhancement Theory, the enhancement and maintenance of a reputation is vital to all adolescents, and the key elements on which this is built is visibility of actions to others. Equally important is the audience to whom these actions are visible, as well as the perceptions

and descriptions of selves and others that foster self-image. For some adolescents, delinquency is a deliberate choice of identity because it is a criterion for group membership, a means to impress peers and gain their approval (Agnew, 1991; Toro, Urberg, & Heinze, 2004; Vitaro, Brendgen, & Wanner, 2005). Moreover, it is a strategy of self-protection and redress for the individual and for the group (Emler & Reicher, 1995). Delinquency provides a self-concept that can be challenging to maintain, involves self-enhancement, and provides self-verification.

Reputation enhancement alone is, however, not sufficient to explain adolescent behaviors such as delinquency. There is a purpose to the seeking of reputations, a form of goal directedness, a striving that accounts for the mission and deliberateness that many adolescents display that leads them to commit delinquent and other antisocial acts and in some cases pursue them with vigor. We now turn to Goal-Setting Theory as a means of explanation of how young people at risk formulate goals to enhance and maintain their nonconforming, delinquent reputations.

## Goal-Setting Theory

Human behavior is, to a large extent, goal-directed (Ford, 1992; Lewin, 1952; Locke, 1991). Social-cognitive theories of goal setting (Ames, 1992; Elliott & Dweck, 1988; Locke, 1991; Nicholls, 1989) agree that individuals set or respond to goals with reference to their self-perceptions (“how good am I at this?”), values (“is it important to me to achieve in this activity?”), and social contexts (“what will significant others think of my performance in this activity?”). Adolescence is a crucial period for the formulation of personal goals according to most educationalists and developmentalists. During this phase of life, important processes of identity formation, decisions about educational opportunities, the consolidation of developing social values, and the construction of plans for one’s future are all very salient. Furthermore, directions taken here have long-term implications (Durkin, 1995; Hechinger, 1992; Henderson & Dweck, 1990; Nurmi, 1991a; Offer, Ostrov, Howard, & Atkinson, 1990; Salmela-Aro, Aunola, & Nurmi, 2007). There are, however, considerable individual differences in the clarity of young people’s goals and the importance they attach to them during this crucial phase of educational and personal development. Mismatches between institutional and individual goals are also evident.

Goals that are congruent with those of the school are embraced by some young people, whereas others appear to reject or devalue them. Many have claimed that within this latter group, individuals appear to have only diffuse, vague, or unchallenging goals. Indeed, being limited in their goals and as lacking a sense of direction is often how delinquents are portrayed (Kerr & Nelson, 1989; Thilagaraj, 1984). We contend, however, that these accounts tend to appraise young people’s goals from the perspective of the educational system

itself or, more generally, from the standpoint of mainstream, middle-class values. We further maintain that delinquents are highly goal oriented and that this orientation is clearly demonstrated in their strong commitment to establish a particular reputation. Although research in the field of goal setting has been prolific, almost all of the studies to date have been conducted in the field of management (Locke & Latham, 1984, 1990).

Goal-Setting Theory (Locke & Latham, 1984, 1990) is based on the proposition that conscious goals regulate human behavior, and it is this that provides a linkage between adolescents' reputations and goals. In this chapter, we build on earlier published work (Carroll, Houghton, et al., 2001) to examine some of the key elements of goal theory (goal difficulty or challenge, goal commitment, goal feedback, goal type) that have been shown to be important to adolescents' goal-directed behavior (Carroll, 1994; Carroll et al., 1997; Carroll, Hattie, et al., 2001; Carroll, Houghton, et al., 2001; Carroll, 2002). The challenge that these goals present to individuals and the composition of the audience that witnesses the individual's actions in the pursuit of these goals are key influences in fostering the types of reputations an individual strives to establish and subsequently maintain.

*Goal Difficulty or Challenge.* According to Locke and Latham (1990), a linear relationship exists between the degree of goal difficulty and performance, with performance levels increasing as the goal becomes more challenging. The more challenging a goal, the greater the performance, as individuals are thought to be more motivated and prepared to try harder to attain the goal. Five meta-analyses comparing the effects of specific, hard goals versus "do your best" goals or no assigned goals were summarized by Locke and Latham (1990). The number of studies involved ranged from 17 to 53 with sample sizes ranging from 1278 to 6635 (Hunter & Schmidt, 1983; Mento, Stell, & Karren, 1987; Tubbs, 1986; Wood, Mento, & Locke, 1987). In terms of effect size, the minimum was .42 and the maximum .80; these are quite substantial effects.

The ambiguity inherent in vague goals allows individuals to justify to themselves that they have tried "hard enough" at a point that falls lower than the performance level of someone who is trying for a specific and challenging goal (Locke & Latham, 1990). This is the reason that specific, hard goals result in higher performance than "do your best" or vague goals. Specific goals contain more information and serve as a clearer focus for behavior and for seeking and receiving feedback. In addition, they provide a measure by which to evaluate performance, a process that allows individuals to change strategies if satisfactory progress toward a goal is not being obtained (Locke & Latham, 1990). For delinquents, specific difficult goals provide extra challenges and risks that assist them to further enhance and/or maintain their reputations and hence continue to build their identities.

*Goal Commitment.* Goal commitment, which refers to one's attachment or determination to reach a goal, has a direct impact on goal performance. That is, the more commitment to a goal, the better the performance. Research has consistently shown that specific, challenging goals lead to high performance,

particularly when individuals are committed to them (Locke & Latham, 1984, 1990). Several factors, including authority figures, peers, peer pressure, role models, valence, publicness of goals, and ego involvement are known to affect goal commitment (e.g., Bandura, 1986; Earley & Kanfer, 1985; Hollenbeck, Williams, & Klein, 1989; Latham & Lee, 1986; Locke & Latham, 1984; Salancik, 1977; Wright, George, Farnsworth, & McMahon, 1993). With reference to peers, these influence goal commitment through pressure, modeling, and competition (Earley & Kanfer, 1985), and public commitment to goals has a greater effect than does private commitment (Hayes et al., 1985; Hollenbeck et al., 1989; Salancik, 1977). For delinquent adolescents, levels of goal commitment are influenced by peer pressure because association with like-minded peers translates inclination (goal setting) into action (goal performance) (Emler & Reicher, 2005; Emler, Reicher, & Ross, 1987).

*Goal Feedback.* A further critical moderator of Goal-Setting Theory is feedback, which can be defined as actions taken by others to provide information regarding aspects of the adolescent's performance (Hattie & Timperley, 2007; Locke & Latham, 1990). Information concerning feedback is a critical aspect of control theory and multiple-cue probability theories (Balzer, Doherty, & O'Connor, 1989). For control theory, it is hypothesized that individuals are motivated to *reduce* any discrepancy between performance and goals by changing behavior, which changes future feedback and thus reduces or eliminates the discrepancy. In contrast, under goal theory, the aim is to *eliminate* the discrepancy and maintain or enhance the goals. Most important is that there appear to be various options available. That is, the adolescent can repeat the task and thus eliminate the discrepancy, reject the feedback, or abandon commitment to the goal. When individuals reach the goal, they can aim to maintain the standard for the performance or raise the standards.

Feedback can also lead to increased attention to the task, more effort to attain the goal, rejection of the feedback message, and attention to the self. Because "the self-esteem system itself is a subjective monitor or gauge of the degree to which the individual is being included and accepted versus excluded and rejected by other people," the reactions of others exert a strong influence on it (Leary, Haupt, Strausser, & Chokel, 1998, p. 1290).

*Goal Type or Content.* Goal content varies qualitatively (such as when people have career goals, educational goals, personal goals, or sporting goals) and quantitatively (e.g., when individuals have either a single goal or multiple goals) (Locke & Latham, 1990). A systematic body of related studies has identified a diversity of interests, activities, relationships, and images that are important to adolescents and that are concerned with future developmental tasks (e.g., Goldsmith, Throfast, & Nilsson, 1989; Nurmi, 1989a, 1991a; Salmela-Aro et al., 2007; Wentzel, 1989). Specifically, previous research has identified various educational and career goals as focal for many young people (Nicholls, Patashnick, & Nolen, 1985; Nurmi, 1989a, 1991a; Wentzel, 1989), with interpersonal, reputation, and self-presentation concerns being prominent among adolescents' goals (Emler & Reicher, 1995; Goldsmith et al., 1989; Hoge, Andrews, & Leschied, 1996; Hopkins & Emler,

1990; Nicholls et al., 1985). Freedom/autonomy goals (Goudas, Biddle, & Fox, 1994; Steinberg & Silverberg, 1986; “to get my own way,” “to be able to do whatever I want”) and physical goals (Duda, 1989; Duda & Nicholls, 1992; Goudas et al., 1994; “to be a member of a sports team,” “to be good at sport”) have been identified as other goal contents.

Some young people have goals relating to illegal activities (e.g., “to break the rules/law”; “to have money for drugs”; Carroll, 1995, 2002; Carroll, Houghton, et al., 2001; Goldsmith et al., 1989; Hoge et al., 1994; Houghton & Carroll, 1996). As discussed earlier, involvement in delinquency can be considered as self-presentation in which a message of defiance is conveyed to and consequently rewarded by delinquent peers (Blackburn, 1993; Emler, 1983, 1984). Indeed, breaking the rules or the law appears attractive and motivating for some individuals. For others, however, delinquent behaviors are a means of attaining other ends. For example, stealing provides the funds to meet material desires (Carroll, 1995; Carroll, Houghton, et al., 1999, 2001). In this case, the delinquent behaviors are necessary or convenient instrumental routes to satisfying other goals.

Research has identified differences in the types of goals of high-achieving young people and those of low-achieving, problem behavior, and delinquent peers (Goldsmith, et al., 1989; Salmela-Aro, Nurmi, & Kinnunen, 1991, Wentzel, 1989). Even so, the importance that different groups of young people (e.g., delinquent, at risk, not at risk) attach to their goals remains relatively unexplored. The realization that personal goals is important to the kinds of reputations that individuals wish to achieve has highlighted the importance of uncovering and investigating goal content pertaining to adolescents' goals.

The nature of the challenges and goal content change as individuals progress through adolescence into late adolescence and on into early adulthood. Late adolescents, for example, begin to consider future educational, occupational, family, and property-related issues. On the other hand, young adults expect to finish their education, get a job, get married, and acquire materials for later life (Nurmi, 1987, 1989a, 1989b, 1991a, 1991b; Nurmi & Pulliainen, 1991; Salmela-Aro et al., 1991). It is not surprising, then, that there is a decline in delinquency as adolescents reach the age of 18 years. Boyfriends or girlfriends, more so than groups, not only become important audiences in the lives of young adults, but they also influence decisions in terms of personal goals and subsequent reputational choices. Reicher and Emler (1986) assert that as adolescents grow older, changes in their goals influence the stages of reputation enhancement. This is discussed in more detail below.

*The Importance of a Peer Audience to Goal Setting.* Recent theory and research points to the possibility that the goals adolescents set are motivated by the desire to present the self to the peer community in a particular way (Agnew, 1991; Emler & Reicher, 1995; Hoge et al., 1996; Oyserman & Saltz, 1993; Piehler & Dishion, 2007; Toro et al., 2004). Emler (1984) argues that a peer audience is therefore extremely important to adolescent goal setting because companions, whether in crime or conformity, often generate and



facilitate shared expressions of interest. Researchers have found that young people who are at risk profess that they actively seek events and situations in which they can initiate highly visible problem behaviors (such as conflict with teachers, aggression, damage to property, dangerous use of drugs) and thereby gain or consolidate peer status. The peer audience is an important component in the formation and enhancement of a reputation as qualitative judgments about the individual's behavior influence subsequent behavior and hence reinforce or lead to modification of the desired self-image.

In summary, according to Goal-Setting Theory (Locke & Latham, 1990), when individuals set specific, challenging goals, rather than vague or easy goals, the outcome is higher performance levels. The level of commitment individuals have to their goals also has a direct, positive effect on performance. Feedback, particularly from peers and authority figures, is used to evaluate performance relative to individuals' goals and is therefore a critical element in goal setting. The choice and content of goals varies among groups of individuals according to their interests, activities, relationships, and images. Finally, the presence of a peer audience is paramount in helping the individual to achieve his or her goals; this then translates into the attainment of the desired reputation.

### **Reputation-Enhancing Goals: Research Evidence for the Integrated Model**

To account for the motivational and social determinants of delinquent behavior, the Reputation-Enhancing Goals Model integrates elements of Reputation-Enhancement Theory and Goal-Setting Theory. This integrated model proposes that many adolescents deliberately choose delinquency in order to pursue a delinquent reputation as an alternative identity. Adolescents base their reputations on academic, conforming social, and/or nonconforming social goals that often relate to the resources and opportunities that they have experienced or to which they have access. Essential feedback, which not only confirms the individual's choice of his or her own self-image but also emphasizes to the individual the importance of visibility of actions, is forthcoming from peers who compose the immediate audience. Individuals commit themselves to achieving a certain reputation among peers through making actions public. The degree of difficulty associated with the task in hand is inextricably linked to commitment, which in turn influences the reputation an individual acquires. For example, Carroll (1995), in a study of Australian delinquents, demonstrated that with car theft, youths admit to first being the lookout when their mates are stealing cars, then actually starting the stolen car and driving it, followed by baiting and out-racing police in high-speed chases, and then having the police chase them while their peers ram the back of the chasing police car.

The degree of difficulty associated with the task is raised over time, thereby making it more challenging and thus providing very visible goals on which to enhance their reputations among their peers.

In the following discussion, each element of the proposed model will be examined, namely the importance of peer audience, challenge, commitment, and feedback. Relevant findings will be highlighted to substantiate the inclusion of elements within the model. The findings from many studies (Carroll, 1994, 2002; Carroll et al., 1997, 2000, 2003; Carroll, Baglioni, et al., 1999; Carroll, Hattie, et al., 2001; Carroll, Houghton, et al., 1999, 2001; Houghton & Carroll, 1996; Houghton, Cordin, & Hopkins, 2007) clearly demonstrate that adolescents are well aware of the negative consequences of specific delinquent behaviors and that they deliberately set goals related to participation in such behaviors to establish and maintain nonconforming social reputations.

An extensive body of qualitative and quantitative research now exists on the importance of reputations to adolescents and how reputations are actually chosen. In 1999, we developed a Reputation-Enhancement Scale (Carroll, Houghton, et al., 1999), which is fully described in Chapter 3, to establish whether individuals at different levels of risk for delinquency have different orientations toward aspects of peer reputation. Two hundred and sixty participants (80 incarcerated delinquent, 90 at risk, and 90 nondelinquent adolescent males) ranging in age from 12 to 18 years completed our scale. Three second-order factors (Conforming Reputation, Nonconforming Reputation, Self-Presentation) were derived from 15 first-order factors. Significant differences in the reputational orientations of delinquent, at-risk, and nondelinquent participants were found, whereas the self-presentation second-order factor did not differentiate the three groups.

Members of the delinquent and at-risk groups saw themselves as nonconforming (e.g., one who breaks rules) and wanted to be perceived by others in this way (e.g., getting into trouble with the police, doing things against the law). These same individuals also admired socially deviant activities (e.g., drug dealing, stealing). For the incarcerated delinquents specifically, participation in car theft, police encounters, using drugs, fighting, and the resultant notoriety helped establish their status in peer groups. For adolescents who are at risk, these individuals seek to attain a nonconforming reputation within the school setting. This is supported by qualitative in-depth interviews (Houghton & Carroll, 1996) showing that adolescents at risk use teacher behavior management strategies (e.g., reprimands, names on board) and school-based behavior management systems (e.g., time out, detention, suspension) to enhance their reputations among peers. (This study is detailed in Chapter 5.) Conversely, members of the nondelinquent group saw themselves as conforming and wanted to be perceived by others in this way (e.g., a good person, trustworthy, getting along well with others). This particular group friendship, and loyalty to their peers, support from their family, and obedience to the rules of society collectively assist to develop public reputations.

With reference to the self-presentation second-order factor that did not differentiate among incarcerated delinquent, at-risk, and nondelinquent adolescents, there is an important qualification. Most young males appear to aspire to certain archetypal masculine attributes such as being tough, a leader, good looking, powerful, and popular, irrespective of their delinquency status. Although these attributes are in common, the ways in which they are expressed differ for different types of adolescents. For example, whereas a delinquent peer may assert his power in the streets or on the subway, a powerful nondelinquent may manifest his strength on the sports field, in a debating team, or as a school prefect.

What is apparent when examining the reputations of adolescents is that they choose to stake their reputations generally around two themes: an Academic Image and/or a Social Image. We investigated this by examining the content of adolescent goals. A series of studies conducted by Carroll et al. (1997) compared and examined the goal orientations of delinquent, at-risk, and not-at-risk adolescents. A hierarchical model of goals was developed whereby goals related to a Social Image and Academic Image tended to explain most of the goals aimed for by adolescents. That is, differences do exist in the level of importance attached to various types of goals associated with an Academic Image (educational, interpersonal goals) compared with the level of importance associated with a Social Image (delinquency, freedom/autonomy goals) among groups of adolescents. Furthermore, the level of importance that adolescents attach to various types of goals in some way assists them in attaining a particular reputation. Not-at-risk adolescents attached greater importance to education and interpersonal goals in particular, as they sought to attain a more Academic Image. That is, goals associated with knowledge, study skills, schooling, and maintaining good relationships had greater importance attached to them by not-at-risk adolescents. In contrast, at-risk and delinquent adolescents attached greater importance to delinquency and freedom/autonomy goals, goals associated with law-breaking activities, exemption from adult control, and independence. These goals are more related to attaining a Social Image. In the Carroll et al. (1997) study, at-risk adolescents as young as 12 years were found to be attaching high levels of importance to goals related to delinquency and freedom/autonomy and lower levels of importance to goals related to education.

In subsequent research (Carroll, Baglioni, et al., 1999; Carroll et al., 2000), we focussed on the content of goals of primary school-aged children and the link between the goals and the reputations of children at risk. In total, 886 Years 4, 5, 6, and 7 students (ages 9–13 years) completed the Children's Activity Questionnaire, an instrument examining the relationship between goal setting and reputation enhancement. The data were analyzed to examine the interrelationships between the various categories of goals and factors of image and reputation; to evaluate the frequency of goal choice; and to determine gender and age differences between the variables associated with self-image and reputation significant for at-risk and not-at-risk primary school-aged children.

Findings indicated that not-at-risk children sought to attain an Academic Image through education and interpersonal goals, whereas at-risk children sought a Social Image and attached greater importance to physical goals. In line with this, children in the not-at-risk group perceived themselves and ideally wished to be perceived as a conforming person, whereas at-risk children perceived themselves and ideally wished to be perceived as nonconforming. Significant gender differences were also found on both sets of dependent variables. The findings of the study with primary school-aged children therefore offer some support to the findings of earlier research (Carroll, 1994, 1995; Carroll et al., 1997; Carroll, Houghton, et al., 1999) that demonstrated the significance of goal-setting and reputation-enhancement variables in adolescent behavior. We return to these findings in later chapters of our book and expand on them.

Two major influences that lead adolescents to choosing goals related to an Academic Image are family influences and self-efficacy. Family influences have been found to be important for choice of educational goals in investigations into the quality of family interaction of male and female adolescents (Nurmi, 1987; Nurmi & Pulliainen, 1991; Purdie, Carroll, & Roche, 2004). Adolescents aged 10–11, 14–15, and 17–19 years who described their family climate in a positive manner had more educational plans than did those who described their family climate in a negative manner. A negative family climate was found to be negatively related to adolescents' planning for the future, indicating that family support is important for the realization of adolescent goals (Nurmi, 1987). Furthermore, adolescents who were more interested in their future education were the more intelligent ones with higher levels of self-esteem (Nurmi & Pulliainen, 1991). Those adolescents with high levels of family discussion were found more frequently to express hopes concerning future family and marriage compared with those reporting a low level of family discussion. Finally, adolescents who reported high levels of imposed parental control also expressed less interest in setting educational goals but more interest in setting leisure goals.

A strong influence over human development and adaptation is judgment of one's efficacy in different domains; this shapes goals and levels of motivation in both social and task domains. In the academic domain, children's self-efficacy beliefs about their academic, social, and self-regulatory capabilities have been shown to predict aggressive, prosocial, and delinquent behaviors as well as academic achievements (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Carroll et al., 2007). Self-efficacy beliefs also contribute to behavior in schools through a range of paths. Individuals who are more likely to lower their academic goals and who are more likely to engage in goal setting characterized by antisocial and problem behaviors are those who doubt their capacities for self-regulation or academic and social success at school (Bandura et al., 1996). Carroll et al. (2007) demonstrated that academic self-efficacy has a strong, direct relationship with academic achievement, that self-regulatory self-efficacy has a direct relationship with academic achievement via delinquency behaviors,

and that social self-efficacy has both a direct and indirect relationship with academic achievement via academic aspirations.

Many adolescents stake their images or reputations on social goals. Of course, academic and social sets of goals are not mutually exclusive, and not all adolescents who do not value academic goals become delinquents. Nevertheless, there are two alternative propositions concerning consequences that may be applied to delinquents. First, these individuals may become dissatisfied, resulting in job avoidance, drug abuse, and/or aggression because they fail to achieve their academic goals. Second, these individuals may set alternative goals and challenges for the purpose of establishing and maintaining a specific delinquent reputation because they do not desire to achieve academic or community-accepted social goals. These individuals use a similar system to achieve goals and satisfaction and to accept new future challenges. The integrated model developed by Carroll and colleagues supports the latter proposition, and a growing body of evidence (see Emler & Reicher, 1995; Goldsmith et al., 1989; Schlenker, Britt, & Pennington, 1996; Tice & Baumeister, 1990; Wentzel, 1989) exists to support the notion that to have a nonconforming social reputation is the social goal of a delinquent adolescent.

It has been demonstrated, for example, that high-achieving and low-achieving students do not pursue the same goals in the classroom (Wentzel, 1989). Research findings show the goal-setting patterns of high-achieving students are in line with their educational institutions and are concerned with pursuing social responsibility and learning goals. In contrast, low-achieving students place priority on goals of the social interaction type that are more likely to be attainable for them and that are not congruent with the goals of their academic institutions. Giving a high priority to moral and self-esteem goals is associated with a tendency to abstain from delinquent acts, whereas a high priority to group loyalty and pleasure and freedom goals is associated with a tendency to participate in delinquent acts (Goldsmith et al., 1989).

*Importance of Audience, Challenge, Commitment, and Feedback.* Individuals' choices of reputational goals are based on what they think they can achieve, what they would like to achieve, and what they can achieve in the presence of a peer audience. It is necessary though for the individual to have high self-efficacy and expectancy because they affect the challenge of goals, levels of goal commitment, and responses to feedback concerning progress (Wood & Bandura, 1989).

In research conducted to develop and test our integrated model, support for the importance of an audience and feedback as crucial moderators of goals and reputations was provided by Carroll (1995). Incarcerated adolescents were interviewed at length concerning their goals and reputations. Information generated revealed that the presence of peers was not only important to delinquent action but also for the feedback they provided, which was vital to delinquents' acceptance as members of the group. A hierarchical structure was found to exist within the delinquent population in which individuals have to commit crime, many of which are committed in public. Moreover, these

individuals were required to also be competent at committing crime to be accepted into a group. Experience in crime is pertinent to goal difficulty, and as delinquents progress upwards in the hierarchical structure of the delinquent population, their goals become more challenging.

In testing the integrated model, we found that delinquents set specific and challenging goals, to which they have commitment, to achieve their desired outcomes and consequently accept future challenges (Carroll, 1995). Furthermore, it was evident that delinquents set these goals for immediate gratification of resources and materials, which they are unable to obtain through law-abiding means. Delinquents not only set goals that are achievable, but also they set more challenging goals as they become proficient at tasks. Furthermore, as delinquents respond instantly and almost impulsively to their wants or needs, achievement of goals is on an immediate and spontaneous basis. What is clear is that there is commitment to the goals that delinquents set, and they report trying the same task in many locations until accomplished (Carroll, 1995).

*The Role of Individuals' Resources in the Management of Reputations.* Individuals have had differential experiences and opportunities by the time they reach adolescence. They also vary in the natural resources they possess at this time. These opportunities and resources often play a critical role in determining whether reputations are based on academic, conforming and/or nonconforming social goals. Carroll, Baglioni, et al. (1999) examined age-related changes in the choice of goals and reputations by replicating the earlier studies of Carroll et al. (1997) and Carroll, Houghton, et al. (1999) with at-risk and not-at-risk primary school-aged children. Although the findings revealed the existence of two second-order factors (Social Image and Academic Image), any distinction between at-risk and not-at-risk children was related mainly to the Academic Image, with very few of the reputational and self-presentation (i.e., Social Image) variables being significantly different between the two groups. This provides strong support for the hypothesis put forward by Emler (1984) and Hopkins and Emler (1990) that around early adolescence, reputation and social status development occurs, and this coincides with the onset of secondary school education. It is possible, therefore, that although Social Image variables are not significant at the primary school age, they *are* gaining importance, and this is subsequently reflected during early adolescence. Again, we explore this in more detail in the forthcoming chapters.

Qualitative research has established that to enhance their reputations, males and females engage in different behaviors, and that the consequences of certain activities are interpreted differently by peers (Martin, 1997). For example, in comparison with boys, female adolescents are more covert in their delinquent behavior and can identify a point in their behavior beyond which they do not transgress, the reason being that they do not want to harm their reputations. In an examination of the relationship between social bonds, reputation enhancement, and delinquent involvement, Smith (1997) provided evidence that the strongest and most consistent predictor of girls' delinquent involvement is self-perception (i.e., the extent to which girls think their friends view

them as having a nonconforming reputation), followed by bonding to peers. Overall, the most powerful explanation of girls' delinquent involvement was *their* perception of their reputation in combination with social bonds (Smith, 1997). It would appear therefore that girls' bonds to others and institutions may be important insofar as they allow for or create a social context in which a particular social identity and reputation are developed. Moreover, Kerpelman and Smith-Adcock (2005) found that when weak bonds existed between mothers and daughters, girls were more likely to associate with delinquent peers.

*Associated Regulating Factors in the Management of Reputations.* Similar to their more conforming peers, delinquents use various processes of self-regulation to maintain their reputations (e.g., self-concept, social skills, moral reasoning, future time perspective). Given the integrated model of delinquency we proposed, which involves adolescents seeking specific, challenging goals to which they are committed, it is expected that delinquent and nondelinquent adolescents will vary in their interpersonal or social skills, future time perspectives, moral insight (with respect to their goals), and self-esteem. It is thus not necessary to assume that delinquents are deficient in these attributes. A body of research evidence exists demonstrating that the most successful delinquents often have adequate levels of proficiency on these attributes (see Bandura, 1986, 1991; Carroll, Houghton, Wood, Perkins, & Bower, 2007; Emler & Hopkins, 1990; Goldsmith et al., 1989; Henderson & Hollin, 1986; Lösel, 1975; Trommsdorf & Lamm, 1980; Ziemann & Benson, 1983). Furthermore, the variable of reputation has been found to be one of the most significant factors for why adolescents indulge in at-risk and delinquent behaviors (Carroll, 1994, 1995; Carroll, Baglioni, et al., 1999; Carroll et al., 2000, 2001, 2003; Carroll, Houghton, et al., 1999; Houghton & Carroll, 1996; Odgers et al., 1996).

To summarize, the Reputation-Enhancing Goals Model has been presented, and evidence has been provided to substantiate the integration of the two theories on which this model is based. According to the Reputation-Enhancing Goals Model, many adolescents pursue a particular kind of reputation; for some this is conforming, whereas for others it is nonconforming. The goals that individuals set themselves and the manner in which they engage in behaviors (public or private) to attain these goals allows them to develop a reputation valued by themselves and others. A delinquent reputation is a desired alternative identity for some individuals, to which they have high levels of commitment and which is moderated by the feedback they receive from peers, who more often than not compose the immediate audience.

## Concluding Comments

Although much is known about the contexts and correlates of delinquency, it seems to be the case that the social psychological factors that underpin specific behavioral choices and sustain involvement in risk-taking and illegal activities

have been relatively neglected. One important exception has been Reputation-Enhancement Theory (Emler, 1984; Emler & Reicher, 1995, 2005), in which delinquency is a deliberate choice, selected in order to achieve and maintain standing within a peer culture that values antiestablishment and tough behavior. It follows from this theory that delinquent adolescents should have goals, though these goals will in some respect be very different from those of their nondelinquent peers. Whereas Reputation-Enhancement Theory alludes to these goals (e.g., Emler & Reicher, 1995), it has yet to elaborate on how they are formulated and how they develop in response to experience in illegal activity and peer feedback.

In this chapter, we have proposed an account of the salience of goals in the development of delinquent reputations by drawing upon Goal-Setting Theory (Locke & Latham, 1990). This theory holds that conscious goals regulate human behavior, and that individuals' progress toward meeting their goals depends on the specificity and commitment with which they address them and the ways in which they respond to feedback provided by the social environment. To date, the majority of work in the goal-setting tradition has focused on the more conventional goals of educational or career attainment. We have argued, however, that to further our understanding of the goals of at-risk and delinquent youths, the same theoretical framework can be applied. Importantly, this claim is counter to many traditional depictions of delinquents as goal-less and undirected.

Many examples from our research and from that of others support the thesis that delinquents do have goals and that their goals regulate their behavior (Carroll, 1994, 2002; Carroll, Baglioni, et al., 1999; Carroll et al., 1997; Carroll, Hattie, et al., 2001; Emler & Reicher, 1995; Goldsmith et al., 1989; Houghton, Carroll, & Shier, 1996; Wentzel, 1989). Evidence from our research with young car thieves (Carroll, 1995) demonstrates that participants in this type of crime progress from relatively peripheral assistance (e.g., lookouts) during initial occasions to increasingly direct activity (e.g., breaking into vehicles) to extreme levels of commitment (e.g., multiple thefts, high-speed races with the police). Reliable differentiating patterns are clearly evident among the reputation goals of nondelinquent, at-risk, and delinquent adolescents. Although each of these groups values self-presentation, they differ with respect to the kinds of reputation they value. Specifically, nondelinquents are more likely to favor the goals of the school, whereas the other groups commit to nonconforming reputations (Carroll et al., 1997, 2003; Carroll, Hattie, et al., 2001; Carroll, Houghton, et al., 1999). At-risk and delinquent youths attach greater importance to delinquency and freedom/autonomy goals (Carroll, 1994; Carroll et al., 1997). Furthermore, the extent to which goals are met is carefully monitored by individuals, who also evaluate their progress and self-efficacy in the delinquent domain.

Proposing that delinquent activity is purposeful and regulated may be an affront to some lay perceptions. On the other hand, it may provide a stronger basis for intervention and treatment. As we increase our knowledge about delinquents' goals and the ways in which these goals contribute to the



organization of their behavior, our understanding of the social-psychological factors that need to be addressed if we are to redirect the activities of young people heading for criminal careers is also enhanced. School is the site within which many potential delinquents begin to discover the benefits of a nonconforming reputation. Of importance, however, is that it also looms as the critical location, with regard to preventative measures. In the following chapters, we present evidence in support of these contentions.

## Chapter 3

# Measuring Delinquency, Goals, and Reputational Orientations in Young Persons

In the previous chapter, our *Reputation-Enhancing Goals Model* was presented along with research findings to show that many young persons become involved and maintain their involvement in delinquency to meet personal autonomy goals and to enhance their reputations with peers. The development of assessment instruments to assess self-regulatory functioning within juvenile delinquent populations has lagged far behind the development of general clinical assessment measures and risk/need assessments for predicting recidivism (Le Blanc, 2002; Motiuk, Motiuk, & Bonta, 1992). Furthermore, the development of comprehensive self-report measures with theoretical and empirical bases for effectively evaluating goal setting and reputational orientations in this population is almost nonexistent in the literature. Therefore, the development and validation of new instruments was necessary. Specifically, we adapted a Self-Report Delinquency Scale for use with our samples and developed an Importance of Goals Scale and a Reputation-Enhancement Scale. These scales have been used in combination to differentiate between not-at-risk, at-risk, and incarcerated adolescents. In this chapter, we describe their development and application with these populations.

### General Method

Briefly, the development of each of the three scales involved three separate yet interrelated phases. In Phase I, information pertaining to young persons' delinquent acts, goals, and reputational orientations was obtained from the research literature, previously established tests, and from interviews with high school adolescents, incarcerated youths, high school teachers, school psychologists, university researchers, and detention center personnel to generate items. Duplicate items were subsequently removed from each of the scales, and draft versions of the new scales were developed.

In Phase II, these versions were administered to 230 (114 males and 116 females) high school students randomly selected from four metropolitan senior high schools in the large Western Australian capital city of Perth. Of the 230 participants, 46 were aged 12–13 years (22 males and 24 females), 67 were aged 13–14 years (36 males and 31 females), 50 were aged 14–15 years (23 males and

27 females), and 67 were aged 15–16 years (33 males and 34 females). All of the schools (student enrollments ranged from 788 to 1375) were in low to middle socioeconomic status metropolitan regions characterized by high percentages of blue collar workers with low household incomes. Data from the Phase II sample were analyzed by maximum-likelihood exploratory factor analysis.

In Phase III, the scales were administered to 260 adolescent males. These were 80 incarcerated delinquent ( $M = 16.1$  years, range 11.6–18.1 years), 90 at-risk ( $M = 14.4$  years, range 12.2–17.2 years), and 90 not at-risk ( $M = 14.4$  years, range 12.2–17.6 years) males. The aim was to assess the extent to which the scales differentiated between delinquents and nondelinquents. At this stage, the findings of the previous Phase II analysis were cross-validated with the item responses of the Phase III participants using MICFA, a first-order, maximum-likelihood confirmatory factor analysis program (Krakowski & Hattie, 1993). To confirm the second-order factor structure, a structural equation modeling approach was used (Jöreskog & Sörbom, 1989). To determine whether our scales could differentiate delinquent, at-risk, and not-at-risk adolescents, multivariate analyses of variance (MANOVAs) were conducted. The estimates of reliability (Cronbach's alpha) were obtained for all subscales.

At-risk adolescents were included in all of the scale developments to determine the possibility of identifying individuals who were involved in delinquent activities to a lesser degree than were incarcerated youths and/or who had not been convicted for their offenses. The nondelinquent participants (high school students) were assigned to either at-risk or not-at-risk categories according to the results obtained from behavioral and situational checklists established by the Western Australian Legislative Assembly Select Committee on Youth Affairs (1992). The checklist comprises 12 behavioral indicators (e.g., truanting, disruptive behavior) and 12 situational indicators (e.g., suspended, expelled, time out). It was completed by the students' classroom teachers and/or school psychologists. If at least 3 of the 12 behavioral *and* at least 3 of the 12 situational indicators from the list of risk factors were checked for an individual student, then he or she was assigned to the at-risk category.

The readability of each of the three scales was at approximately 9 years of age, and their reading ease score was 91, representing less than 6 years of schooling (Flesch, 1948). Adolescent males were the primary focus of this early research because, as we described in Chapter 1, there is a disproportionate number of males involved in crime compared with females (Siegel et al., 2006; Wundersitz, 1993); there being almost five times as many males as females under juvenile justice supervision in Australia.

### **Adapted Self-Report Delinquency Scale**

The Adapted Self-Report Delinquency Scale (ASRDS; Carroll et al., 1996) was based on the Australian Self-Report Delinquency Scale (Mak, 1993), which had satisfactory construct and concurrent validity and high internal

reliability ( $\alpha = .88$ ). During the interviews in Phase I of the scale development, the content of Mak's Self-Report Delinquency Scale and juvenile criminal offenses not included in the scale were discussed with participants. Briefly, items in the Mak scale relating to the abuse of barbiturates and cheating on vending machines were replaced with an overall item measuring the use of hard drugs (e.g., speed, LSD, ecstasy) and one overall item measuring cheating on vending machines. Six items were also added to the scale. These covered selling drugs, being suspended/excluded from school, ignoring a red light while driving, driving a car at high speeds in the city, being involved in a hit-and-run accident, and taking part in an armed robbery.

As a consequence, a draft self-report delinquency scale comprising 44 items was formulated to determine an individual's involvement, regardless of frequency of participation, in a range of relatively minor to serious delinquent acts over the preceding 12 months. Four "lie" items, one police warning item, and one Children's Court item are interspersed among the 44 items to verify reliability (Mak, 1993). Participants responded to each of the items of the scale by placing a tick in a box labeled "yes" if they had been involved in the delinquent activity during the past 12 months or a tick in the box labeled "no" if they had not been involved in the activity during the past 12 months. A 12-month retrospective period was assessed in line with recommendations of previous researchers (e.g., Canter, 1982; Hindelang, Hirschi, & Weis, 1981; Mak, 1993).

When the data obtained from 230 randomly selected high school students were analyzed, seven factors emerged that accounted for 59.2% of the total variance. These were given labels similar to those used by Mak (1993); namely, theft and burglary, motor vehicle offenses, drug-related offenses, assault, vandalism, public disorder, and school-related offenses. The items with lower factor loadings were related to motor vehicle offenses and the possession of a weapon, primarily because there were no convicted delinquents involved at this stage. Estimates of reliability for the subscales ranged from .62 to .79 compared with a range of .49 to .73 in Mak (1993).

The findings of the Phase II analyses were cross-validated with the item responses of the 260 participants in Phase III using MICFA, a first-order, maximum-likelihood confirmatory factor analysis program (Krakowski & Hattie, 1993). The chi-square goodness-of-fit indicated support for the model ( $\chi^2 = 1360.3$ ,  $df = 644$ ,  $p < .001$ ) and the Tucker-Lewis index of goodness-of-fit was greater than .9. The adjusted goodness-of-fit was calculated to be greater than .85 (AGFi > .85). The results of the Phase III analysis confirmed the interpretations of Phase II and indicated that the factor structure was replicable and validated across different samples. Higher loadings were obtained on 25 of the 38 "delinquency" items because of the inclusion of the delinquent sample and the overall higher mean age of the sample. The seven factors with item loadings for the Phase III data are provided in Table 3.1. The estimated reliabilities for each of the validated subscales for Phase III data are also shown in Table 3.1. Estimates of reliability (Cronbach's alpha) ranging from .67 to .91 were considered acceptable.

**Table 3.1** Items, factor loadings, and cronbach's alpha for the adapted self-reported delinquency scale using Phase III data

Item	Factor loading
<i>Factor 1: Theft and burglary (<math>\alpha = .83</math>)</i>	
Stolen money of >\$10	.78
Broken into house/building with intent	.86
Stolen money of <\$10	.45
Stolen a bicycle or parts of a bicycle	.53
Stolen things or parts out of a car/motorbike	.73
Shoplifted	.61
<i>Factor 2: Motor vehicle offenses (<math>\alpha = .91</math>)</i>	
Driven a car >100 km/hr in the metro area	.83
Ignored a red light while driving a car	.76
Joyriding in a stolen car	.89
Stolen and driven a car	.82
Raced with other vehicles	.78
Driving without a motor vehicle license	.69
Driven an unregistered car	.62
<i>Factor 3: Drug-related offenses (<math>\alpha = .83</math>)</i>	
Bought alcohol	.67
Drunk alcohol in a public place	.64
Used marijuana	.67
Used hard drugs (e.g., LSD, speed, ecstasy)	.71
Sold drugs	.75
Driven a car/motor bike when drunk or >.08	.62
<i>Factor 4: Assault (<math>\alpha = .70</math>)</i>	
Taken part in a robbery, using a weapon/force	.67
Used force to get things from others (e.g., money)	.65
Been involved (i.e., driving) in a hit-and-run accident	.43
Used a weapon of some sort (e.g., knife)	.69
<i>Factor 5: Vandalism (<math>\alpha = .75</math>)</i>	
Deliberately damaged school property	.58
Deliberately damaged public property	.75
Deliberately damaged private property	.59
Deliberately started a fire	.39
Tilted/banged on vending/game machines	.56
Put graffiti on public places	.64
<i>Factor 6: School-related offenses (<math>\alpha = .67</math>)</i>	
Taken part in a fist fight within a group situation	.66
Deliberately hurt or beat up someone	.60
Been suspended/expelled from school	.66
<i>Factor 7: Public disorder (<math>\alpha = .68</math>)</i>	
Tricked someone on the telephone	.56
Gone to see an R-rated film in the cinema	.48
Made abusive phone calls	.61
Got onto bus, into cinema and not paid fee	.51
Not attended class/wagged school/truant	.51
Run away from home	.42

In 35 of the 38 types of delinquent activity, the delinquent group was found to have significantly higher participation rates compared with those of the not-at-risk group. Official delinquency status was also found to be associated with significantly higher participation rates in 25 of the 38 types of delinquent activity when compared with those of at-risk adolescents. These results demonstrated the scale could detect differences in delinquent involvement in three groups known to differ in their official delinquency status.

In 9 of the 38 types of delinquent activity, participants in the at-risk group reported a higher participation rate than the delinquent group. These activities were primarily of a public disorder and vandalism nature and may be because at-risk adolescents may have greater access to property and the public, whereas incarcerated adolescents may have reported lower participation because of their situational constraints. It may also be that at-risk adolescents deliberately initiate highly visible conflict situations (e.g., paying the improper fee, cheating on vending machines, playing truant) in order to establish a nonconforming reputation and hence increase their social status among peers.

Although this chapter focuses on the initial development of our instruments, the ASRDS has been administered extensively during the past decade, and data from these studies are presented in subsequent chapters.

## **The Importance of Goals Scale**

The Importance of Goals Scale (Carroll et al., 1997) sought to measure goal importance, differentiate the various types of goals, and compare the importance of different goals to groups of delinquent, at-risk, and not-at-risk adolescents. Broadly speaking, the available literature indicated that adolescent goals are organized around matters of social and personal identity, education, career, and material development. From these generic concerns, eight areas of adolescent goals were determined as the starting point for the scale development: educational, career, interpersonal, delinquency, freedom/autonomy, self-presentation, status, and physical goals.

In Phase I, a provisional pool of 75 goals was generated from a range of related studies that focused on a diversity of adolescent activities, interests, relationships, and images and that concerned future developmental tasks that had been identified previously as important to adolescents (e.g., Goldsmith et al., 1989; Nurmi, 1989b, 1991a; Wentzel, 1989). Specifically, items were included from the work of Nicholls et al. (1985), Nurmi (1989b, 1991a), and Wentzel (1989) that related to educational and career goals (e.g., “to pass my exams,” “to get a job,” “to get an apprenticeship/trade”). Also prominent among adolescents’ concerns are interpersonal, status, and self-presentation issues (Emler & Reicher, 1995; Goldsmith et al., 1989; Hoge et al., 1996; Hopkins & Emler, 1990; Nicholls et al., 1985). To cover these areas, items were included (e.g., “to be fair to others,” “to be truthful,” “to be known for

something,” “to keep my reputation,” “to have a lot of power”). The previous research also highlighted freedom/autonomy goals (Goudas et al., 1994; Steinberg & Silverberg, 1986; e.g., “to get my own way,” “to be able to do whatever I want”), delinquency goals (Hoge et al., 1994; e.g., “to break the rules/law,” “to have money for drugs”), and physical goals (Duda, 1989; Duda & Nicholls, 1992; Goudas et al., 1994; e.g., “to be a member of a sports team,” “to be good at sport”).

The provisional pool of 75 goals was presented to 12 raters (juvenile justice personnel, teachers, psychologists, incarcerated youths, high school students, university researchers, postgraduate students, and parents) to assess the relevance of each goal to adolescents and to determine that the terminology used was readily familiar to the target group. As a result, 24 items were deleted leaving 51 items for inclusion in the Importance of Goals Scale. The response format was a 3-point scale with each point on the scale being anchored with the words: *not important*, *sometimes important*, and *very important*. Simplicity was considered crucial to ensure that participants did not become fatigued or frustrated because of literacy problems.

Data from the Phase II sample ( $N = 230$  high school students) were analyzed by maximum-likelihood exploratory factor analysis. Eight factors were clearly identified and were assigned the following labels: delinquency goals, status goals, educational goals, physical goals, career goals, interpersonal goals, freedom/autonomy goals, and self-presentation goals (see Table 3.2 for a list of the goals). The factor names assigned to the Importance of Goals Scale were confirmed by the 12 independent raters who previously assisted with item construction in Phase I. With no reference to the factor loadings, these raters were given eight factor names and asked to suggest the most appropriate category for each item (cf. Hattie, 1981). Because of unsatisfactory levels of agreement (less than 65%) across the 12 raters and because of their low contributions to each subscale, eight items were removed, resulting in an eventual Importance of Goals Scale composed of 43 items. Estimates of reliability (Cronbach's alpha) ranged from .60 to .84 and were considered acceptable.

In Phase III ( $N = 260$  adolescent males: 80 delinquent, 90 at risk, and 90 not at risk), the findings of the Phase II analysis were cross-validated with the item responses of the participants in Phase III using MICFA (Krakowski & Hattie, 1993). For all subscales, the Tucker–Lewis index of goodness-of-fit was greater than .9, and the adjusted goodness-of-fit was calculated to be greater than .85 for the Importance of Goals Scale. The interpretations of Phase II were confirmed. Higher loadings than reported in Phase II were obtained on 33 of the 43 items. Table 3.2 shows the eight factors with item loadings for the Phase III data along with the estimated reliabilities for each of the validated subscales. Estimates of reliability (Cronbach's alpha) ranged from .62 to .84.

When the similarity between the factor loadings of the Phase II and Phase III samples was examined using the coefficients of congruence between the different factor analyses, these were found to be high, with all congruence coefficients greater than .91.

**Table 3.2** Items, factor loadings, and cronbach’s alpha for the importance of goals scale using Phase III data

Item	Factor loading
<i>Factor 1: Delinquency goals (α = .83)</i>	
To break the rules/law	.87
To cheat and steal to get what I want	.89
To rip others off	.79
To have money for drugs	.52
<i>Factor 2: Status goals (α = .74)</i>	
To be a member of the “in” group	.57
To be known for something	.64
To be part of a group	.53
To be the leader of a group	.69
To keep my reputation	.55
<i>Factor 3: Educational goals (α = .82)</i>	
To get things done on time	.59
To be a good student	.76
To learn new things at school	.63
To pass my exams	.80
To get high grades in every subject	.82
To get high grades to do course at university	.58
To get better marks than my friends	.32
<i>Factor 4: Physical goals (α = .84)</i>	
To be a member of a sports team	.77
To be good at sport	.72
To play in the top sports team in state/country	.83
To be better than others at sport	.70
<i>Factor 5: Career goals (α = .62)</i>	
To get an apprenticeship/trade	.62
To get a job	.57
To do a course at Technical & Further Education (college)	.62
<i>Factor 6: Interpersonal goals (α = .78)</i>	
To be loyal to others	.68
To be fair to others	.73
To help others	.64
To be truthful/honest	.59
To be dependable and responsible	.57
To have others trust in me	.53
To make or keep friends	.32
<i>Factor 7: Freedom/autonomy goals (α = .73)</i>	
To be able to do whatever I want	.63
To get my own way	.72
To buy whatever I want	.70
To have plenty of money	.50
To have fun	.34
To be able to get by on my own	.29
To have the latest designer clothes	.46



**Table 3.2** (continued)

Item	Factor loading
<i>Factor 8: Self-presentation goals (<math>\alpha = .80</math>)</i>	
To be considered a hero	.69
To be considered tough by others	.66
To have a lot of power	.72
To always be right	.48
To be felt sorry for by others	.56
To be the center of attention	.63

Eight first-order factors were obtained from the previous exploratory and confirmatory factor analyses of the Importance of Goals Scale (delinquency, status, physical, freedom/autonomy, self-presentation, educational, career, and interpersonal). The first five first-order factors were grouped together to form a second-order factor labeled Social Image, and the last three first-order factors were grouped together to form a second-order factor labeled Academic Image. With second-order factors, it was expected that the delinquency factor would load positively with the Social Image and negatively with the Academic Image (for more discussion, see Carroll et al., 1997).

To confirm the second-order factor structure, a structural equation modeling approach was used (Jöreskog & Sörbom, 1989), which specified eight factors underlying the 43 items and two second-order factors: Social Image and Academic Image. The chi-square goodness-of-fit statistic was 1748.15, with 850 degrees of freedom, and the ratio of chi-square to degrees of freedom was 2.05, which is within an acceptable range (Jöreskog & Sörbom, 1989). The adjusted goodness-of-fit statistic was .74, and the root mean square residual was .047. Although not an excellent fit, the modification indices indicated that no meaningful changes could be made to significantly improve the fit. The parameter estimates from the proposed second-order model were all significantly different from zero (greater than two times the respective standard errors), meaning the model is theoretically defensible. The second-order factor loadings and correlations between these two factors and the eight first-order factors are shown in Fig. 3.1. All loadings are more than twice their standard errors, but the correlation between the two second-order factors is not significant, supporting the inference that Social Image and Academic Image are independent dimensions.

To determine whether our new Importance of Goals Scale could differentiate delinquent, at-risk, and not-at-risk adolescents, and to compare the goal orientations of the three groups, a one-way MANOVA was conducted of the Phase III data using the eight factors as dependent variables. The independent variable was group (delinquent, at risk, and not at risk). Differences in the centroids of these groups were evident ( $F = 8.02$ ,  $df = 16$ ,  $500$ ,  $p < .001$ ), and subsequent univariate ANOVAs revealed significant between-group differences on the delinquency, physical, freedom/autonomy, educational, and interpersonal

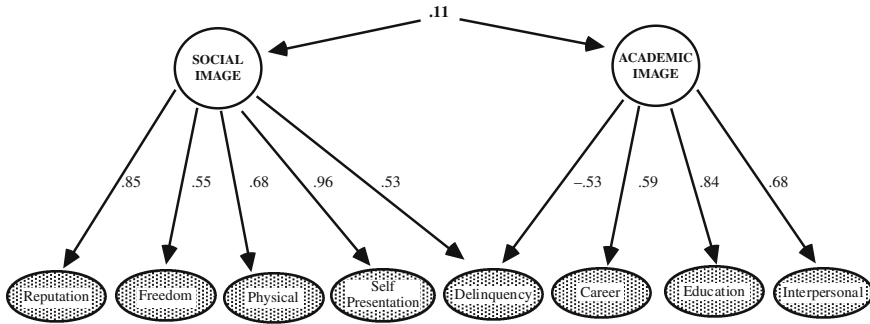


Fig. 3.1 Factor loadings for the eight first-order factors of the two second-order factors

subscales. Scheffé multiple comparisons (see Table 3.3) indicated that for the delinquency subscale, as expected, the delinquent group scored highest, and not-at-risk participants scored significantly lower than did at-risk and delinquent groups. On physical goals, the delinquent group scored significantly higher than did the at-risk group. No significant differences were evident between the delinquent and not-at-risk groups. For freedom/autonomy goals, the delinquent and at-risk groups scored similarly (at-risk group having the highest mean scores) and significantly higher than did the not-at-risk group. For educational and interpersonal goals, the not-at-risk group scored significantly higher compared with scores of the delinquent and at-risk groups. There were also significant differences between the delinquent and at-risk groups for educational goals. The not-at-risk group scores were similar to those of the at-risk group (and exceeding the means of the delinquent group) on career goals.

Table 3.3 Univariate analysis of variance using the eight first-order factors as dependent variables and risk-level groups as independent variables\*

Factor	Not at risk (N = 90) Mean (SD)	At risk (N = 90) Mean (SD)	Delinquent (N = 90) Mean (SD)	F value	p value
Status	10.46 <sub>a</sub> (2.24)	10.47 <sub>a</sub> (2.63)	10.38 <sub>a</sub> (3.10)	.03	.97
Physical	9.11 <sub>ab</sub> (2.21)	8.30 <sub>a</sub> (2.71)	9.32 <sub>b</sub> (2.67)	3.96	.02*
Freedom	15.47 <sub>a</sub> (2.49)	16.87 <sub>b</sub> (2.95)	16.65 <sub>bc</sub> (2.82)	6.64	<.002*
Self- presentation	9.99 <sub>a</sub> (2.55)	10.90 <sub>a</sub> (3.35)	10.49 <sub>a</sub> (3.18)	2.02	.13
Delinquency	4.36 <sub>a</sub> (.94)	6.06 <sub>b</sub> (2.27)	6.25 <sub>bc</sub> (2.42)	24.37	<.001*
Education	18.00 <sub>a</sub> (2.01)	15.63 <sub>b</sub> (3.44)	14.18 <sub>c</sub> (4.14)	29.66	<.001*
Career	7.30 <sub>a</sub> (1.48)	7.28 <sub>a</sub> (1.70)	7.10 <sub>a</sub> (1.78)	.34	.71
Interpersonal	18.92 <sub>a</sub> (2.23)	17.06 <sub>b</sub> (3.00)	17.90 <sub>bc</sub> (2.72)	11.06	<.001*

Note: Means within rows having no letter in their lowercase subscripts in common differ at  $p < .05$  using the Scheffé method. Possible range of values for each factor score: career (1–9), physical, delinquency (1–12), status (1–15), self-presentation (1–18), freedom/autonomy, education, interpersonal (1–21).

\*df = 2, 257.

All three groups wished to maintain and enhance their reputations and demonstrated similar levels of importance to goals regarding self-presentation.

In summary, the findings revealed that delinquent, at-risk, and not-at-risk adolescents assign the same level of importance to self-presentation, status, and career goals, suggesting that all adolescents believe it important to present themselves in a given way and to have a particular social identity, character, and/or status among a group of friends. To have an occupation and/or some work skills were also seen to be important, which supports the work of Nurmi and colleagues (e.g., Nurmi, 1987, 1991a, 1991b; Salmela-Aro et al., 2007). Of interest was that a similar level of importance was attached to physical goals (sports and team activities) by delinquent and not-at-risk adolescents compared with that of the at-risk adolescents. It may be that at-risk adolescents (in contrast with their not-at-risk peers) are in a state of transitory disaffection with school and organized school activities, whereas delinquents are incarcerated and physical activities may therefore take on a more positive function within this environment where they may contribute to or reflect on peer solidarity.

Differences in the level of importance attached to various types of goals associated with an Academic Image (educational, interpersonal goals) compared with the level of importance associated with a Social Image (delinquency, freedom/autonomy goals) were clearly evident among the three groups. Not-at-risk adolescents wished to attain a more Academic Image and attached greater importance to education and interpersonal goals in particular. These findings correspond with those of Wentzel (1989), Duda and Nicholls (1992), and Nicholls (1984, 1989).

On the other hand, among at-risk and delinquent adolescents, greater importance was attached to delinquency and freedom/autonomy goals, goals associated with socially deviant activities, exemption from adult control, and independence. These goals are related to attaining a Social Image. To some extent, at-risk and delinquent adolescents tend to attach importance to goals that overlap with what Nicholls (1984, 1989) has identified as an ego orientation. That is, they attach importance to goals relating to relative peer status and work avoidance. It may be, however, that these individuals also invest task orientation in some of their goals: for example, they may be prepared to work hard to achieve outcomes that others (schools, parents, authorities) see as undesirable, such as delinquent activities. This notion will be addressed further in subsequent chapters.

## **Reputation-Enhancement Scale**

We also developed a measure of reputation enhancement among adolescents so as to differentiate between the orientations toward reputations of incarcerated delinquent, at-risk, and nondelinquent adolescents. As a result of the Phase I interviews and reviews of Gold, Mattlin, and Osgood (1989) and Emler's (1990) research pertaining to young people's reputations, 160 items were generated

initially. The same individuals who participated in the interviews were then presented with the 160 items and asked which, if any, of the items were not concerned with types of conforming and nonconforming adolescent self-image, peer perception, and social status. There was unequivocal agreement among the raters that 12 of the items should be deleted as they were virtually identical to other items in the pool or were irrelevant to adolescent reputational profiles. On the basis of these judgments, a draft Reputation-Enhancement Scale comprising 148 items was formulated.

The 148 items were clustered into seven dimensions initially labeled sociability, social desirability, self-perception of public self, ideal public self, self-description of private self, ideal private self, and communication of events, on the basis of previously reported research findings. The items sought to determine differences in the values placed on the dimensions by delinquent, at-risk, and nondelinquent adolescents.

Briefly, the eight *sociability* items determine the value participants place on friendship and group membership. It is measured on a 6-point scale ranging from *strongly agree* to *strongly disagree*.

The 32 *social desirability* items examine the admiration of socially conforming and socially deviant activities. It has a 6-point response format consisting of the following points: *not at all*, *very little*, *somewhat*, *quite a bit*, *very much*, and *completely*.

The 15 *self-perception of public self* items measure how participants thought that their peers viewed them in terms of their conforming and nonconforming behavior and their reputational status. The respondents were asked the focus question “What do your friends think of you?” and responded to each of the 15 items (e.g., your friends think that you are popular) using a 6-point scale with anchors *never*, *hardly ever*, *occasionally*, *sometimes*, *often*, and *always*.

The 15 *ideal public self* items measure how participants would ideally like to be viewed. For example, if participants scored high on nonconforming items, they ideally would like to be viewed as more delinquent in character than someone who scored low on the nonconforming items. The items are identical to the 15 self-perception items, except that the focus question asks “What would you *like* your friends to think of you?” An identical 6-point response format to the self-perception items is used for responses to the ideal public self items.

The 12 *self-description of private self* items are based on a list of semantic differentials measuring how participants describe themselves now in terms of power (i.e., strong–weak; tough–soft) and activity (i.e., mean–kind; nasty–friendly) attributes. This uses a 6-point scale, with semantic differential anchor points ranging from one extreme of a relevant variable (e.g., “I think I am a leader”) to the other extreme (e.g., “I think I am a follower”).

The *ideal private self* items measure how participants would ideally like to be viewed in terms of power and activity attributes. For example, if participants scored high on activity attributes (break the rules, mean, nasty), they ideally would like to be viewed as more delinquent in their activities. These items are identical to the 12 self-description items, except that the focus statement is

different: "Describe how you would really like to be." An identical response format to that of the self-description items was also employed for the ideal private self items.

The purpose of the *communication of events* items is to determine the patterns of disclosure of events to adults and/or peers by adolescents. Participants are presented with a series of events, which included, for example, stealing money from a shop, gaining the highest marks in the class, cheating on an exam, and being chosen for the school sports team. Using a 3-point response format (with the anchors of "yes," "perhaps," and "no"), participants indicate whether they would disclose information concerning the different events to six categories of people, namely best friend, group of friends, teacher, mum, dad, brothers/sisters.

Maximum-likelihood exploratory factor analysis with the data from 230 high school adolescents established that the *sociability* dimension was unidimensional and that there were three factors underlying the *self-perception of public self* and *ideal public self* dimensions and two factors underlying the other four dimensions (*self-description*, *ideal private self*, *social desirability*, and *communication of events*). Estimates of reliability (Cronbach's alpha) ranged from .60 to .91; the conforming self-perception factor of the self-perception dimension produced the lowest reliability.

As in the development of the Importance of Goals Scale, the same interviewees as in the initial item selection were given the 15 factor names and asked to suggest the most appropriate category for each item (cf. Hattie, 1981). Because of unsatisfactory levels of agreement (less than 65%) across interviewees on the assignment of the items to the factor, and/or they were also found to have low contributions to each of the dimensions, 21 items were removed.

Factor analysis revealed two factors were being measured on the *social desirability* dimension (an individual's admiration of social deviance and an individual's admiration of social conformity). Three factors were being measured on the *self-perception of public self* and *ideal public self* dimensions (reputational, conforming, and nonconforming self-perception, and reputational, conforming, and nonconforming ideal public). Factor analysis of the *self-description of private self* and *ideal private self* dimensions revealed that two factors were being measured in each of the two dimensions; namely, activity self-description, power/evaluation self-description, activity ideal private self, and power/evaluation ideal private self. For the *communication of events* scale, two factors were being measured (peer communication and adult communication). The combined variables loaded satisfactorily on either the peer communication or adult communication factor, and both subscales had high reliabilities.

Factor analysis, with assignment of factor labels by independent raters, yielded 15 factors from the remaining 127 reputational items in the Reputation-Enhancement Scale. The findings of the Phase II analysis were then cross-validated with the item responses of the 260 participants in Phase III using MICFA (Krakowski & Hattie, 1993). For all subscales, the Tucker-Lewis index of goodness-of-fit was greater than .9 and the adjusted goodness-of-fit was greater than .85 for five of the

seven reputation-enhancement dimensions. For the communication of events dimension and for the admiration dimension, the adjusted goodness-of-fit was .75 and .53, respectively. The results confirmed the earlier interpretations that the factor structure is replicable across different samples. The 15 factors with item loadings and estimated reliabilities for each of the validated subscales are provided in Table 3.4. Estimates of reliability (Cronbach’s alpha) ranged from modest (.59) to strong (.92).

**Table 3.4** Items, factor loadings, and cronbach’s alpha for the reputation-enhancement scale

Item	Factor loading
<b>Sociability</b>	
<i>Factor 1: Sociability (<math>\alpha = .70</math>)</i>	
My friends mean a lot to me	.57
I’m very loyal to my friends	.59
I’m pretty friendly	.38
I need my friends	.51
I go out of my way to be with friends	.61
I make new friends quicker than most	.34
Most people like my group of friends	.46
I’d rather be with a group of friends than by myself	.35
<b>Social desirability</b>	
<i>Factor 1: Admiration of social deviance (<math>\alpha = .92</math>)</i>	
My friends admire a boy who steals and drives cars	.75
My friends admire a boy who outraces police cars	.80
My friends admire a boy making money dealing drugs	.70
I admire a boy who outraces police cars	.75
I admire a boy who steals and drives cars	.70
My friends admire a boy who uses lots of drugs	.70
My friends admire a boy who is good at fighting	.56
Most kids my age admire a boy outracing police cars	.67
I admire a boy who makes money dealing drugs	.69
My friends admire a boy who talks back to teachers	.59
Most kids my age admire a boy stealing/driving cars	.60
I admire a boy who is good at fighting	.52
Most kids my age admire a boy who’s good at fighting	.46
I admire a boy who uses lots of drugs	.66
I admire a boy who talks back to teachers	.53
Most kids my age admire a boy who makes money dealing drugs	.64
Most kids my age admire a boy who talks back to teachers	.48
Most kids my age admire a boy who uses lots of drugs	.52
<i>Factor 2: Admiration of social conformity (<math>\alpha = .81</math>)</i>	
My friends admire a boy who always returns things	.86
I admire a boy who always returns things	.83
Most kids my age admire a boy who return things	.81
My friends admire a boy who obeys his parents	.52
I admire a boy who obeys his parents	.45

**Table 3.4** (continued)

Item	Factor loading
Most kids my age admire a boy who obeys his parents	.43
Most kids my age admire a boy who is a good athlete	.20
My friends admire a boy who is a good athlete	.30
I admire a boy who is a good athlete	.31
Most kids my age admire a boy who is popular with girls	.23
I admire a boy who is popular with girls	.25
My friends admire a boy who is popular with girls	.23
<b>Self-perception of public self</b>	
<i>Factor 1: Nonconforming self-perception (<math>\alpha = .87</math>)</i>	
My friends think that I:	
break rules	.91
do things against the law	.78
get into trouble	.88
get into trouble with the police	.78
am a bad kid	.61
am a bully	.35
<i>Factor 2: Conforming self-perception (<math>\alpha = .59</math>)</i>	
My friends think that I:	
am a good person	.63
get along well with other people	.78
can be trusted with secrets	.36
<i>Factor 3: Reputational self-perception (<math>\alpha = .64</math>)</i>	
My friends think that I:	
have a reputation	.61
am tough	.52
am a leader	.49
am popular	.59
<b>Ideal public self</b>	
<i>Factor 1: Nonconforming ideal public self (<math>\alpha = .88</math>)</i>	
I would like my friends to think that I:	
break rules	.86
get into trouble	.86
do things against the law	.82
get into trouble with the police	.80
am a bully	.45
am a bad kid	.65
<i>Factor 2: Conforming ideal public self (<math>\alpha = .73</math>)</i>	
I would like my friends to think that I:	
get along well with other people	.77
am a good person	.77
can be trusted with secrets	.57
<i>Factor 3: Reputational ideal public self (<math>\alpha = .68</math>)</i>	
I would like my friends to think that I:	
am popular	.56
have a reputation	.57

**Table 3.4** (continued)

Item	Factor loading
am a leader	.59
am tough	.64
<b>Self-description of private self</b>	
<i>Factor 1: Activity self-description (<math>\alpha = .71</math>)</i>	
Nasty–friendly	.92
Kind–mean	–.66
One who breaks rules–one who doesn’t break rules	.50
<i>Factor 2: Power/evaluation self-description (<math>\alpha = .64</math>)</i>	
Strong–weak	.60
Tough–soft	.55
To have no power–to have much power	–.55
Rich–poor	.29
Leader–follower	.40
Not good looking–good looking	–.50
<b>Ideal private self</b>	
<i>Factor 1: Activity ideal private self (<math>\alpha = .77</math>)</i>	
Nasty–friendly	.90
Kind–mean	–.76
One who breaks rules–one who doesn’t break rules	.59
<i>Factor 2: Power/evaluation ideal private self (<math>\alpha = .71</math>)</i>	
Strong–weak	.71
Not good looking–good looking	–.46
Tough–soft	.51
Rich–poor	.68
To have no power–to have much power	–.38
Leader–follower	.38
<b>Communication of events</b>	
<i>Factor 1: Peer communication (<math>\alpha = .82</math>)</i>	
I would tell my friends if I:	
outraced a police car	.71
smoked a joint	.70
stole money from a shop	.74
got my name in the paper for something I did wrong	.68
set up a boy so he got into trouble instead of me	.63
was involved in a car accident	.57
cheated on an exam	.62
was chosen for the school/club sports team	.22
got the highest mark in my class	.19
<i>Factor 2: Adult communication (<math>\alpha = .78</math>)</i>	
I would tell my parent(s)/teacher(s) if I:	
outraced a police car	.76
cheated on an exam	.68
set up a boy so he got into trouble instead of me	.70
smoked a joint	.70
stole money from a shop	.74

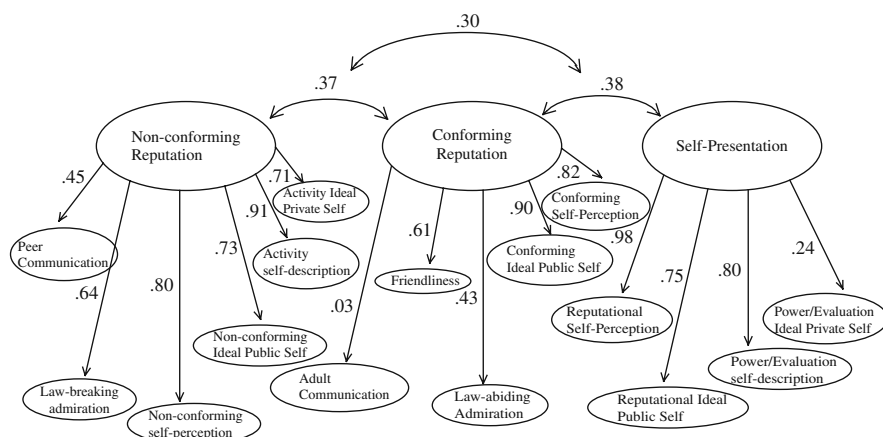


**Table 3.4** (continued)

Item	Factor loading
got my name in the paper for something I did wrong	.61
got the highest mark in my class	.18
was involved in a car accident	.33
was chosen for the school/club sports team	.12

To assess the similarity between the factor loadings of the Phase II and Phase III samples, congruence coefficients were used. The outcomes of the comparison indicated that the congruence between the factors derived from both samples was high, with all congruence coefficients being greater than .89. These findings suggest that the instrument is dependable and can be used across different data sets.

Fifteen first-order factors were derived from the exploratory and confirmatory factor analyses of the Reputation-Enhancement Scale (sociability, admiration of social deviance, admiration of social conformity, nonconforming self-perception, conforming self-perception, reputational self-perception, nonconforming ideal public self, conforming ideal public self, reputational ideal public self, activity self-description, power/evaluation self-description, activity ideal private self, power/evaluation ideal private self, peer communication, adult communication). Six first-order factors were grouped together to form a second-order factor labeled Nonconforming Reputation, five first-order factors were grouped together to form a second-order factor labeled Conforming Reputation, and four first-order factors were grouped together to form a second-order factor labeled Self-Presentation (see Fig. 3.2).



**Fig. 3.2** Factor loadings for the 15 first-order factors of the three second-order factors

A structural equation modeling approach (Jöreskog & Sörbom, 1989) was used to confirm the second-order factor structure. The model specified 15 factors underlying the 127 reputational items and three second-order factors: Nonconforming Reputation, Conforming Reputation, and Self-Presentation. The chi-square goodness-of-fit statistic was 2067.97, with 928 degrees of freedom, and the ratio of chi-square to degrees of freedom was 2.22, which is within an acceptable range (Jöreskog & Sörbom, 1989). The adjusted goodness-of-fit statistic was .74, and the Tucker–Lewis index was .78. Although these latter fit indices are not above the often cited .95 (or even .90) level, they were considered as very reasonable given that this is a second-order measurement model – and no better model was found. More importantly, the parameter estimates from the proposed second-order model were all significantly different from zero (greater than two times the respective standard errors), meaning the model is theoretically defensible. Figure 3.2 presents the second-order factor loadings and correlations among these three factors and the 15 first-order factors. All loadings were more than twice their standard errors, but the correlations between the three second-order factors were not significant, supporting the inference that Conforming Reputation, Nonconforming Reputation, and Self-Presentation are independent dimensions.

Using the 15 factors as dependent variables, a one-way MANOVA was conducted, the results of which revealed differences in the centroids of these groups ( $F = 12.59$ ,  $df = 30$ ,  $486$ ,  $p < .001$ ). Subsequent univariate ANOVAs revealed significant between-group differences on 9 of the 15 subscales, as shown in Table 3.5.

Scheffé multiple comparisons indicated that on the Nonconforming Reputation second-order factor, all six subscales differentiated between the groups; the nondelinquent group scored significantly lower on all subscales compared with scores of the at-risk and delinquent groups. There were no significant differences between the means of the subscales for the at-risk and delinquent groups. On the Conforming Reputation second-order factor, the nondelinquent group scored significantly higher than did the at-risk and delinquent groups on two of the five subscales (conforming self-perception and conforming ideal private self). Conversely, on adult communication, the at-risk group scored significantly higher than did the other two groups. It may be that whereas nondelinquent adolescents have little to report and delinquents have established their status as that of a nonconforming individual, adolescents at risk are in a transitory state and are still establishing their reputations. Therefore, they need to communicate their misdeeds to as wide an audience as possible, including adults.

There were no between-group differences on the Self-Presentation second-order factor, with all three groups reporting the desire to enhance and maintain their chosen reputations and to present themselves in a similar manner with regard to the subscales of reputational self-description, reputational ideal public self, power/evaluation self-description, and power/evaluation ideal

**Table 3.5** Univariate analysis of variance using the 15 first-order factors as dependent variables and risk-level groups as independent variables

Factor	Nondelinquent ( <i>N</i> = 90)	At risk ( <i>N</i> = 90)	Delinquent ( <i>N</i> = 80)	<i>F</i> value	<i>p</i> value
	Mean	Mean	Mean		
<i>Conforming Reputation</i>					
Sociability	9.8 <sub>a</sub>	9.3 <sub>a</sub>	9.2 <sub>a</sub>	3.07	.05
Social conformity	9.5 <sub>a</sub>	9.0 <sub>a</sub>	9.5 <sub>a</sub>	1.15	.32
Conforming self-perception	8.2 <sub>a</sub>	7.5 <sub>b</sub>	8.0 <sub>a</sub>	4.78	.009*
Conforming ideal public self	7.8 <sub>a</sub>	7.1 <sub>b</sub>	7.7 <sub>a</sub>	4.06	.009*
Adult communication	21.4 <sub>b</sub>	23.3 <sub>a</sub>	21.5 <sub>b</sub>	4.75	.009*
<i>Nonconforming Reputation</i>					
Social deviance	4.6 <sub>a</sub>	7.7 <sub>b</sub>	7.9 <sub>b</sub>	56.48	.001*
Nonconforming self-perception	4.6 <sub>a</sub>	7.0 <sub>b</sub>	7.7 <sub>b</sub>	36.02	.001*
Nonconforming ideal public self	5.7 <sub>a</sub>	8.5 <sub>b</sub>	10.8 <sub>b</sub>	149.81	.001*
Activity self-description	7.0 <sub>a</sub>	11.5 <sub>b</sub>	11.2 <sub>b</sub>	41.69	.001*
Activity ideal private self	4.9 <sub>a</sub>	9.2 <sub>b</sub>	7.5 <sub>c</sub>	24.90	.001*
Peer communication	13.7 <sub>a</sub>	16.8 <sub>b</sub>	16.9 <sub>b</sub>	11.15	.001*
<i>Self-Presentation</i>					
Reputational self-perception	7.8 <sub>a</sub>	8.3 <sub>a</sub>	8.5 <sub>a</sub>	2.71	.07
Reputational ideal public self	8.5 <sub>a</sub>	8.6 <sub>a</sub>	7.8 <sub>a</sub>	3.18	.04
Power/evaluation self-description	18.1 <sub>a</sub>	18.4 <sub>a</sub>	19.0 <sub>a</sub>	.90	.41
Power/evaluation ideal private self	24.1 <sub>a</sub>	23.3 <sub>a</sub>	22.8 <sub>a</sub>	4.04	.13

\* Means having no letter in their lowercase subscripts in common differ at  $p < .01$  using the Scheffé method.

private self. All three groups wished to be seen as popular, tough, strong, leaders, good-looking, and powerful.

In summary, 15 factors were derived from 127 reputational items with three second-order factors (Nonconforming Reputation, Conforming Reputation, Self-Presentation). The reputational profiles of nondelinquent, at-risk, and delinquent adolescents were found to differ significantly, with delinquents and young persons at risk seeing themselves as nonconforming (e.g., one who breaks rules) and as wanting to be perceived by others in this way (e.g., getting into trouble with the police, doing things against the law). They also admired socially deviant activities (e.g., drug dealing, stealing). Conversely, nondelinquent young persons see themselves as conforming and want to be perceived by others in this way (e.g., a good person, trustworthy, getting along well with others). To attain this, they develop public reputations through friendship and loyalty to their peers, support from their family, and obedience to the rules of society.

It is clear, then, that different groups of adolescents are concerned about maintaining different kinds of reputations; that they choose a particular

self-image they wish to promote; that an audience is necessary to develop and maintain this social identity; that the peer group is the most influential audience; and that the social goal of a delinquent is to have a public delinquent reputation.

## **Concluding Comments**

At the outset of this chapter, we highlighted that instruments to assess self-regulatory functioning within delinquent populations have not been developed to the same extent as have general clinical assessment measures and risk/need assessments for predicting recidivism. It was also emphasized that the development of comprehensive self-report measures (with theoretical and empirical bases) for evaluating goal setting and reputational orientations in delinquent populations is almost nonexistent in the literature. We sought to contribute to the measurement of critical social-psychological processes engaged in by young people contemplating or participating in delinquent activities. The development and validation of the Adapted Self-Report Delinquency Scale, the Importance of Goals Scale, and the Reputation-Enhancement Scale extend earlier theoretical and empirical contributions and provide instruments of potentially wide application in the study of delinquent orientations. Moreover, that these three instruments differentiate between not-at-risk, at-risk, and incarcerated adolescents enhances our understanding of how adolescent behavior is motivated by the desire to present the self to the peer community in a particular way. The following chapters illustrate how these instruments have been used extensively with primary school-age and secondary school-age students to more fully understand the developmental trajectories that young persons follow as they become involved in risky activities and transit the trajectory to delinquent status.

## Chapter 4

# Children at Risk: Initiating Goals and Reputations

The roots of delinquency are often evident from an early stage in children's lives (Farrington, 1995; Loeber & Farrington, 2000). Sutton, Utting, and Farrington (2006) found that by the time children enter primary school, those who have not learned self-control may resort to aggression and bullying to attain attention and control. Significant developments have taken place prior to this during the preschool years, however, in children's capacity for behavioral self-regulation, particularly in the ability to attain challenging, personal, or situational goals (Winsler, Diaz, Atencio, McCarthy, & Chabay, 2000). Children who are known to be at significant risk for continuing behavior problems are often identified by teachers and/or parents at this preschool level because of their overactive, impulsive, inattentive, or generally difficult to manage behaviors (Winsler et al., 2000). These difficulties in self-regulation make it more likely that, unless they are taught the skills of self-regulation for their behavior, these children will become isolated from others and will be gradually drawn into the reinforcing company of similarly antisocial peers (Sutton et al., 2006). Walker and Irving (1998) highlight that for many of these rejected children, the reputations attached to them because of their inappropriate behavior initiates a self-perpetuating cycle. It becomes difficult to break out of this cycle: attempts by these children to improve their behavior and change their reputations are disregarded by peers and teachers alike. Moreover, in their own study of 62 preschool-aged children, support was found for "the prediction that children as young as preschool age actively utilize reputational information when making judgments about the likability of their peers" (Walker & Irving, 1998, p. 5). In addition, it was found that children consistently rated unpopular peers as less likely to engage in prosocial activities and more likely to display negative behavior. In short, as early as the preschool years, children formulate and share biased expectations of peer behavior based on the reputation of the child.

Longitudinal studies such as that by Moffitt, Caspi, Dickson, Silva, and Stanton (1996), which identified trajectories for two distinguishable groups of male offenders (life-course persistent and adolescent limited), also confirm the early origins of delinquency. The persistent antisocial behavior of individuals who become chronic, serious, or violent offenders are often first identified by

teachers at the preprimary and primary school levels. These children exhibit high levels of inattention, overactivity, tantrums, bullying, aggression, and disorganization, poor social skills and interpersonal relationships, impaired attachment, and low levels of achievement (Sutton et al., 2006). The outcome for many is short-term or long-term suspension or exclusion from school.

Some children who manifest problem behavior at an early age run into serious problems at school quite early on. For example, in Australia, all states report that the number of children being suspended in the primary school years for antisocial and aggressive acts increases yearly. In one Australian state in 2005 with a government state school population of 130,000 primary school students, 4061 students (3703 males and 358 females) were suspended from school, which represents 3.12% of the state government primary school population. Of particular interest, however, is the number of 5- to 10-year-old students suspended. At the younger age range, 155 (135 males and 20 females) 6-year-old students were suspended in 2005. This increased substantially for 6-year-old students with 258 (240 males and 18 females) being suspended. Suspension is generally a last-resort measure for schools, and the prognosis for children receiving this treatment so early is not favorable. Over the next few years, but still quite early, the numbers of children with serious behavior problems increase. At the mid primary school age level (8–10 years of age), 594 (540 males and 54 females) and 827 (759 males and 68 females) children, were suspended. By the final years of primary schooling (11 and 12 years of age respectively), the number of children suspended peaked, with 874 (817 males and 57 females) and 1116 (989 males and 127 females).

When the reasons for suspension are examined, physical assault of students (33%) and violation of school rules (25%) are the two most frequently cited categories for suspension, with verbal abuse of staff (20%) and physical assault of staff (6%) being the next most common. Thus, antisocial behaviors are enacted by increasing numbers of children within the mid to late primary school age ranges, with some showing serious problems as early as age 5 or 6.

A number of factors, including child maltreatment, interparental violence, family disruption, maternal depression, poverty, life stress, temperament, neuropsychological deficits, pregnancy complications, parental educational status, and occupational status negatively impact on children's development. In particular, the cumulative nature of these factors and their timing affect the pathways to adaptation or maladaptation (Appleyard, Egeland, van Dulmen, & Sroufe, 2005). The classic Isle of Wight (Rutter, 1979) and Rochester Longitudinal studies (Sameroff, 2000) provide evidence of the effects of cumulative risk. In addition, these studies demonstrate that cumulative risk in early childhood, compared with that incurred in middle childhood, may have differential outcomes. In the case of the Isle of Wight study, such early experiences set the course for the individual's subsequent interactions with the environment and may therefore herald more adverse effects than the same risk factors experienced in later life (Sroufe, Carlson, Levy, & Egeland, 1999).

Some children are more resistant to cumulative risk in early childhood and appear to develop into resilient and robust individuals (see Garnezy, 1993; Luthar, 1991; Luthar, Cicchetti, & Becker, 2000; Rutter, 1987; Werner, 1990, 1993). Some children oscillate across the boundaries of being at risk and not at risk, whereas others (as evidenced in the primary school suspension data) have a history of persistent and chronic misbehavior. What we posit is that within this population of at-risk primary school-aged children, there exist two subgroups: one indulges in antisocial behavior by deliberate choice and the other does so because of cumulative risk factors combined with specific interpersonal and affective behavioral traits. This is not to say that the boundaries between the two subgroups are firm or easily demarcated: in practice, whatever the origins or causes of children's problem behaviors, they will mix with peers of varying backgrounds. However, the suggestion is that a small but significant proportion of children who show very early signs of serious antisocial behavior may have a predisposition to the development of more callous, unemotional traits that result in serious, violent, and chronic offending. This subgroup will go on to commit a disproportionate amount of criminal activity and is set on a trajectory from a very early age. The unique risk factors associated with their developmental trajectory are considered in more detail in Chapter 8. The other subgroup consists of children who, for various reasons, are drawn into antisocial activities in middle childhood or beyond and whose trajectories are interwoven with the development of reputations and deliberate goal choices.

In Chapter 2, we presented our *Reputation-Enhancing Goals Model* in which we propose, following Emler and Reicher (1995), that adolescents who become delinquent do so deliberately through setting nonconforming social goals to achieve a particular reputation. Many of these school-aged individuals are labeled at-risk and are in transition to delinquent status, and it is their very "at-riskness" that promotes their social identity among peers. From what we presented in the opening paragraphs of this chapter, it appears that for many children, these behaviors are frequently interrelated and are often established during childhood, particularly the final years of primary schooling, and extend into adolescence (Eaton et al., 2006). It is during these primary school years where children at risk tend to follow a path typically from poor school achievement to involvement in other antisocial behaviors. Furthermore, as clearly evident in the suspension data presented earlier, it is in the final years of primary schooling where most students are suspended for such antisocial activities. Importantly, many of these activities are committed in the presence of a deviant peer group with similar antisocial attitudes who provide positive feedback and subsequent kudos and reputation. The successful execution of these activities is important for initiating early identity formation and attaining the reputation of choice among these at-risk and often underachieving children.

Thus, it may be that some children emerge very early – around age 5 or 6 – and these are likely to be life-course offenders. There are others, however, who emerge over the ensuing few years, but these are likely to be temporary offenders. They choose to acquire "bad" reputations. Alternatively, schools may

initially be able to contain those who are problematic from the early years, but increasingly, as they move through the primary years, they become harder to manage, and their transgressions become more serious. Eventually, schools cannot maintain their “containment,” and these young people get suspended. These possibilities will be explored in subsequent chapters of our book.

## **Social Reputations and Goals by Deliberate Choice**

There is an increase in routine contact with like-minded peers at the age of about 11 during the latter years of primary school (Hopkins & Emler, 1990), and the age distribution curve consistently shows a steep rise in antisocial and delinquent behaviors during early adolescence. Research conducted by Emler and colleagues confirms the significance of variations in social reputation and the age at which social image and identity become important to children. Our Reputation-Enhancing Goals Model posits that many children may become involved in delinquency to meet personal autonomy goals. It follows that orientations toward goals that are indicative of a social image and nonconforming reputation may assist in the identification of at-risk status among primary school children before maladaptive behavior occurs in adolescence.

Children as young as 10 are able to formulate behavioral goals (Nurmi, 1989b). Children of this age are already competent planners for reaching simple social goals and are interested in future occupational and school-related topics. Moreover, *Openheimer and Van der Wilk* (1987) found that at about the age of 8, children change in interests from imaginary heroes referring to power and fame to more realistic orientations. To more fully explore the goals and reputations of younger children, we adapted measures (the Importance of Goals Scale and the Reputation-Enhancement Scale) originally developed for high school students (as described in Chapter 3).

## **Initiating Social Identity Through Goals and Reputation**

*Measuring Goals and Reputations in Children.* A cohort of 886 10-year-old ( $n = 309$ ), 11-year-old ( $n = 303$ ), and 12-year-old ( $n = 274$ ) children from five primary schools (two located in low, two in low-middle, and one in high socioeconomic status areas) in one of the capital cities of Australia participated in our study. Of these students, 54.4% ( $n = 482$ ) were male and 45.6% ( $n = 404$ ) were female. Participants were assigned to at-risk and not-at-risk groups by the researchers according to the results obtained from a checklist of behavioral and situational at-risk indicators established by the Western Australian Legislative Assembly Select Committee on Youth Affairs (1992). The Children’s Activity Questionnaire (CAQ; Carroll et al., 2000), which comprises three parts, was



administered. Part A seeks demographic information (e.g., age, gender, nationality, socioeconomic status, and family constellation). Part B comprises a modified version of the Importance of Goals Scale (see Carroll et al., 1997). Part C contains a modified version of the Reputation-Enhancement Scale (see Carroll, Houghton, et al., 1999). (Full descriptions of these scales can be found in Chapter 3.) Thus, we sought to determine the suitability of the CAQ, with some modifications, for use with younger samples.

The factor structure proved replicable and validated across the high school and primary school samples as is shown in Table 4.1. Higher loadings than those reported for the high school sample were obtained for 32 of the 42 items.

**Table 4.1** Comparison of factor loadings of high school sample and primary school sample for each item of the importance of goals scale

Item	Factor loading	
	High school sample	Primary school sample
<i>Factor 1: Delinquency goals</i>		
To break the rules/law	.74	.82
To cheat and steal to get what I want	.53	.88
To rip others off	.34	.81
<i>Factor 2: Status goals</i>		
To be a member of the “in” group	.68	.69
To be known for something	.63	.74
To be part of a group	.58	.53
To be the leader of a group	.51	.54
To keep my reputation	.51	.53
<i>Factor 3: Educational goals</i>		
To get things done on time	.74	.66
To be a good student	.71	.71
To learn new things at school	.49	.67
To pass my exams	.47	.73
To get high grades in every subject	.35	.73
To get high grades to do course at university	.33	.51
To get better marks than my friends	.28	.22
<i>Factor 4: Physical goals</i>		
To be a member of a sports team	.79	.81
To be good at sport	.75	.78
To play in the top sports team in state/ country	.70	.84
To be better than others at sport	.71	.70
<i>Factor 5: Career goals</i>		
To get an apprenticeship/trade	.53	.74
To get a job	.32	.60
To do a course at Technical & Further Education (college)	.57	.73

**Table 4.1** (continued)

Item	Factor loading	
	High school sample	Primary school sample
<i>Factor 6: Interpersonal goals</i>		
To be loyal to others	.87	.38
To be fair to others	.81	.65
To help others	.48	.67
To be truthful/honest	.39	.29
To be dependable and responsible	.36	.66
To have others trust in me	.25	.29
To make or keep friends	.17	.36
<i>Factor 7: Freedom/autonomy goals</i>		
To be able to do whatever I want	.73	.55
To get my own way	.60	.69
To buy whatever I want	.58	.79
To have plenty of money	.49	.72
To have fun	.48	.36
To be able to get by on my own	.27	.35
To have the latest designer clothes	.26	.61
<i>Factor 8: Self-presentation goals</i>		
To be considered a hero	.37	.79
To be considered tough by others	.21	.73
To have a lot of power	.17	.76
To always be right	.32	.62
To be felt sorry for by others	.51	.62
To be the center of attention	.48	.73

Similarly, in terms of the Reputation-Enhancement Scale, the factor structure proved replicable and validated across the high school and primary school samples as shown in Table 4.2.

The congruence coefficients for each of the factors of the Importance of Goals Scale and the Reputation-Enhancement Scale comparing the factor loadings of the high school sample with the factor loadings of the primary school sample are reported in Table 4.3. The findings of the comparison between the two samples indicated that the congruence between the factors derived from both samples is high, suggesting that the instrument is replicable and able to be used with a younger primary school sample.

Overall, the factor analyses derived eight first-order factors from the Importance of Goals Scale (delinquency, status, physical, freedom/autonomy, self-presentation, educational, career, and interpersonal). Previous research (Carroll et al., 1997) using structural equation modeling has confirmed two second-order factors (Social Image and Academic Image) from the eight first-order factors. To assess the goodness-of-fit of the data to the specified model and to determine if the second-order factor structure could be replicated using a younger primary

**Table 4.2** Comparison of factor loadings of high school sample and primary school sample for each item of the reputation-enhancement scale

Item	Factor loading	
	High school sample	Primary school sample
<b>Sociability</b>		
<i>Factor 1: Sociability</i>		
My friends mean a lot to me	.67	.66
I'm very loyal to my friends	.65	.65
I'm pretty friendly	.57	.52
I need my friends	.56	.63
I go out of my way to be with friends	.50	.53
I make new friends quicker than most	.45	.36
I'd rather be with a group of friends than by myself	.35	.45
Most people like my group of friends	.44	.56
<b>Social desirability</b>		
<i>Factor 1: Admiration for social conformity</i>		
If a kid my age:		
gets the highest marks, I'd think they were cool	–	.61
wins an award, most kids would think they were cool	–	.61
obeys their parents, most kids would think they were cool	–	.60
gets the highest marks, most kids would think they were cool	–	.60
is well behaved in school, most kids would think they were cool	–	.59
wins an award, I'd think they were cool	–	.58
obeys their parents, I'd think they were cool	–	.54
returns what they borrow, most kids would think they were cool	–	.50
is good at sport, I'd think they were cool	–	.42
returns what they borrowed, I'd think they were cool	–	.41
is well behaved in school, I'd think they were cool	–	.37
is good at sport, most kids would think they were cool	–	.10
<i>Factor 2: Admiration for social deviance</i>		
If a kid my age:		
wags school (truants), most kids would think they were cool	–	.75
is a troublemaker, most kids would think they were cool	–	.73
steals money, most kids would think they were cool	–	.72
cheats on a test, most kids would think they were cool	–	.71
smokes cigarettes, most kids would think they were cool	–	.67
is a bully, most kids would think they were cool	–	.56
steals money, I'd think they were cool	–	.34
cheats on a test, I'd think they were cool	–	.32
wags school (truants), I'd think they were cool	–	.28
smokes cigarettes, I'd think they were cool	–	.27
is a bully, I'd think they were cool	–	.26
is a troublemaker, I'd think they were cool	–	.21

**Table 4.2** (continued)

Item	Factor loading	
	High school sample	Primary school sample
<b>Self-perception of public self</b>		
<i>Factor 1: Nonconforming self-perception</i>		
My friends think that I:		
break rules	.95	.79
do things against the law	.80	.63
get into trouble	.76	.81
get into trouble with the police	.72	.66
am a bad kid	.67	.74
am a bully	.48	.75
<i>Factor 2: Conforming self-perception</i>		
My friends think that I:		
am a good person	.94	.60
get along well with other people	.39	.72
can be trusted with secrets	.37	.60
am likely to do well at school	.31	.68
<i>Factor 3: Reputational self-perception</i>		
My friends think that I:		
am tough	.52	.71
am a leader	.49	.75
am popular	.49	.77
<b>Ideal public self</b>		
<i>Factor 1: Nonconforming ideal public self</i>		
I would like my friends to think that I:		
break rules	.88	.84
get into trouble	.79	.84
do things against the law	.75	.63
get into trouble with the police	.74	.75
am a bully	.69	.77
am a bad kid	.63	.81
<i>Factor 2: Conforming ideal public self</i>		
I would like my friends to think that I:		
get along well with other people	.81	.81
am a good person	.74	.76
can be trusted with secrets	.57	.58
am likely to do well at school	.46	.75
<i>Factor 3: Reputational ideal public self</i>		
I would like my friends to think that I:		
am popular	.75	.77
am a leader	.53	.79
am tough	.40	.75
<b>Self-description</b>		
<i>Factor 1: Activity self-description</i>		
Nasty–friendly	.90	.85

**Table 4.2** (continued)

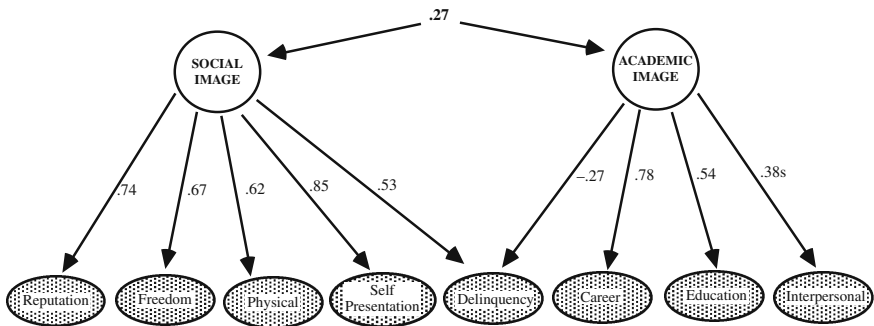
Item	Factor loading	
	High school sample	Primary school sample
Kind–mean	.61	.80
One who breaks rules–one who doesn't break rules	.60	.78
<i>Factor 2: Power/evaluation self-description</i>		
Strong–weak	.66	.76
Tough–soft	.59	.68
To have no power–to have much power	.51	.69
Rich–poor	.42	.54
Leader–follower	.34	.54
Not good looking–good looking	.24	.36
<b>Ideal private self</b>		
<i>Factor 1: Activity ideal private self</i>		
Nasty–friendly	.91	.87
Kind–mean	.76	.83
One who breaks rules–one who doesn't break rules	.65	.82
<i>Factor 2: Power/evaluation ideal private self</i>		
Strong–weak	.63	.80
Not good looking–good looking	.54	.41
Tough–soft	.54	.66
Rich–poor	.53	.71
To have no power–to have much power	.43	.80
Leader–follower	.39	.61

school sample, a similar structural equation modeling approach (Jöreskog & Sörbom, 1993) using LISREL 8 (Linear Structural Relations) was conducted. For the Importance of Goals Scale, an initial model based on substantive theory was used (Carroll et al., 1997). The model specified four first-order factors (status, physical, freedom/autonomy, self-presentation) to load on the first second-order factor, Social Image, and three first-order factors (educational, career, interpersonal) to load on the other second-order factor, Academic Image. The model specified the delinquency factor to load positively on Social Image and negatively on Academic Image.

The chi-square goodness-of-fit statistic was 66.54 ( $p < .001$ ) with 17 degrees of freedom. The RMSEA (Root Mean Square Error of Approximation) was .058 with an associated  $p$  of .16, which is within the range suggested by Browne and Cudeck (1989). Further, the root mean square residual (RMR) was .046, and all relative fit indices were greater than .90. Taken together, there is evidence to support the second-order factor structure obtained by Carroll et al. (1997). Figure 4.1 reports the second-order factor loadings and correlations between these two second-order factors and the eight first-order factors. The correlation between the two second-order factors is not significant, indicating two independent and nonrelated dimensions. On the basis of previous substantive theory (Carroll et al., 1997), the fit of this model, though not excellent, does appear to be acceptable. It appears that the underlying meaning of the

**Table 4.3** Congruence coefficients for the factors of the importance of goals scale and the reputation-enhancement scale

Scale or subscale	Congruence coefficient
<b>Importance of Goals Scale</b>	
Factor 1: Delinquency goals	.96
Factor 2: Status goals	.99
Factor 3: Educational goals	.96
Factor 4: Physical goals	.99
Factor 5: Career goals	.99
Factor 6: Interpersonal goals	.87
Factor 7: Freedom/autonomy goals	.94
Factor 8: Self-presentation goals	.92
<b>Reputation-Enhancement Scale</b>	
<i>Sociability</i>	.99
<i>Social desirability</i>	
Factor 1: Admiration for social deviance	–
Factor 2: Admiration for social conformity	–
<i>Self-perception</i>	
Factor 1: Nonconforming self-perception	.98
Factor 2: Conforming self-perception	.87
Factor 3: Reputational self-perception	.90
<i>Ideal public self</i>	
Factor 1: Nonconforming ideal public self	.99
Factor 2: Conforming ideal public self	.99
Factor 3: Reputational ideal public self	.98
<i>Self-description</i>	
Factor 1: Activity self-description	.98
Factor 2: Power/evaluation self-description	.99
<i>Ideal private self</i>	
Factor 1: Activity ideal private self	.99
Factor 2: Power/evaluation ideal private self	.97



**Fig. 4.1** Factor loadings for the eight first-order factors on the two second-order factors

Importance of Goals Scale can be replicated with a younger primary school sample. Thus, it appears from these data that the goals set by primary school-aged children are commensurate with those set by their high school counterparts who strive to attain either an academic or social image.

The factor analysis derived 13 first-order factors from the Reputation-Enhancement Scale (friendliness, admiration for social conformity, admiration for social deviance, nonconforming self-perception, conforming self-perception, reputational self-perception, nonconforming ideal public self, conforming ideal public self, reputational ideal public self, activity self-description, power/evaluation self-description, activity ideal private self, and power/evaluation ideal private self). Previous research (Carroll, Houghton, et al., 1999) using structural equation modeling has confirmed three second-order factors (nonconforming reputation, conforming reputation, and self-presentation) from the 13 first-order factors of the Reputation-Enhancement Scale. To assess the goodness-of-fit of the data to the specified model and similarly to determine if the second-order factor structure could be replicated using a younger primary school sample, a structural equation modeling approach (Jöreskog & Sörbom, 1993) using LISREL 8 was conducted.

In replicating the initial solution, the model in the current research specified five first-order factors (nonconforming self-perception, nonconforming ideal public self, activity self-description, activity ideal private self, admiration for social deviance) to load on the first second-order factor, nonconforming reputation; four first-order factors (sociability, conforming self-perception, conforming ideal public self, admiration for social conformity) to load on the second-order factor conforming reputation; and four first-order factors (reputational self-perception, reputational ideal public self, power/evaluation self-description, power/evaluation ideal private self) to load on the second-order factor self-presentation. Using LISREL 8, it was impossible to create an acceptable solution. The model did not fit the data well; parameters were meaningless and not interpretable. As such, the second-order model of the Reputation-Enhancement Scale could *not* be replicated with the primary school sample.

Previous longitudinal research (Houghton & Carroll, 2002) has demonstrated that reputation enhancement assumes a significant role by the first year of high school, especially for those young persons engaging in risk-taking behaviors. These current findings assume increased importance for understanding social identity formation and reputation initiation, particularly among young persons at risk, in the middle to final years of primary schooling (i.e., from 10 years of age). Emler (1984) argued that social reputation and image become highly important with the onset of adolescence and that the visibility of activities by a peer audience is critical in the adolescent years. The current findings support this claim and indicate that the salience of peer reputation is detectable at least as early as the transition to adolescence.

*Gender and Risk Status.* We examined differences in the goal orientations and social reputations of at-risk and not-at-risk girls and boys aged 10–12 years using a series of multivariate analyses of variance (MANOVAs). For goals,

there were significant multivariate main effects for both gender [ $F(8, 791) = 2.90, p < .004$ ] and risk level [ $F(8, 791) = 5.24, p < .001$ ]. For gender, there were significant differences for physical and self-presentation goals with males scoring higher ( $M = 9.08$  and  $M = 11.90$ ) than females ( $M = 8.03$  and  $M = 9.63$ ), respectively. Male participants attributed significantly more importance to goals associated with sports and team activities and goals associated with attaining a particular social identity when compared with their female counterparts. These findings reflect differences in Social Image and may indicate the added status males attach to peer relationships.

For risk level, there were significant differences between the two risk-level groups for education, interpersonal, and physical goals. The mean scores indicated that not-at-risk children reported significantly higher mean scores (than did at-risk children) for education ( $M = 18.51$  vs.  $M = 17.28$ ) and interpersonal goals ( $M = 20.12$  vs.  $M = 18.99$ ), whereas at-risk children scored significantly higher on physical goals than did not-at-risk children ( $M = 9.60$  vs.  $M = 8.45$ ).

Carroll et al. (1997) argued that both educational and interpersonal goals are part of an Academic Image, whereas physical goals are part of a Social Image. Not-at-risk children who wish to attain a more Academic Image attached greater importance to education and interpersonal goals. That is, not-at-risk primary school-aged children attached importance to goals associated with knowledge, study skills, schooling, and maintaining good relationships; these goals are all related to attaining an Academic Image. This is consistent with Nicholls' (Duda & Nicholls, 1992; Nicholls, 1984, 1989) evidence that children who achieve at school have higher task orientation. In contrast, at-risk primary school-aged children attached greater importance to physical goals. This type of goal is related to attaining a Social Image.

Although this research has identified differences in goal orientations between at-risk and not-at-risk children, there were goals that were rated similarly by the two groups. These goals were those relating to delinquency, career, freedom/autonomy, status, and self-presentation. That is, all of the children, regardless of being at risk or not at risk, believed it important to present themselves in a given way and to have a particular social identity, character, and/or status among a group of friends. As we highlighted earlier in this chapter, it appears that this stage of primary schooling is characterized by a state of transitory disaffection where children oscillate between the at-risk and not-at-risk groupings. This finding pertaining to similar levels of delinquency goals is clearly important in the context of a 3-year longitudinal study conducted by Houghton and Carroll (2002). This study demonstrated that as children progressed from 12 years of age (transition from primary to high school) to 15 years of age, educational goals declined in importance, whereas delinquency goals continued to have increased importance for both at-risk and not-at-risk individuals alike. Therefore, our findings raise the question of whether early intervention should be targeted at this age range to preempt the transition to delinquency.



For reputation enhancement, the results of a  $2 \times 2$  (risk level by gender) MANOVA on the 13 reputation enhancement variables revealed significant multivariate main effects for both risk level [ $F(13, 637) = 6.68, p < .001$ ] and gender [ $F(13, 637) = 2.15, p < .02$ ]. There were significant differences between the two risk-level groups for 7 of the 13 dependent variables; namely, admiration for social deviance, nonconforming self-perception, nonconforming ideal public self, conforming self-perception, conforming ideal public self, activity self-description, and activity ideal private self. Table 4.4 provides the observed means for the reputation-enhancement variables with underlining where significant differences occurred.

Table 4.4 also shows that not-at-risk children reported significantly higher mean scores for conforming self-perception and conforming ideal public self. That is, participants in the not-at-risk group (when compared with the at-risk group) perceived themselves and ideally wished to be perceived as a good person, getting along well with other people, likely to do well at school, and trustworthy with secrets. In contrast, at-risk children scored significantly higher on admiration for social deviance, nonconforming self-perception, nonconforming ideal public self, activity self-description, and activity ideal private self. Participants in the at-risk group admired socially deviant activities (e.g., bullying, smoking cigarettes, school truanting, and stealing money) significantly more than did participants in the not-at-risk group. At-risk participants perceived themselves and ideally wished to be perceived as a bad kid, a troublemaker, a bully, breaking rules, doing things against the law, and getting into trouble with the police. They described themselves and

**Table 4.4** Observed means for reputation-enhancement variables with independent variable of risk level and gender

Dependent variable	Not at risk	At risk	Male	Female	Possible range of scores
Sociability	19.82	19.09	19.43	20.08	1–24
Social deviance	14.33	<u>15.79</u>	14.59	14.47	1–24
Social conformity	20.17	19.21	20.07	19.99	1–24
Nonconforming self-perception	7.95	<u>11.51</u>	9.16	7.59	1–24
Nonconforming ideal public self	7.04	<u>9.21</u>	6.69	6.93	1–24
Conforming self-perception	<u>13.18</u>	11.81	12.67	13.37	1–16
Conforming ideal public self	<u>14.86</u>	13.84	14.49	14.99	1–16
Reputational self-perception	6.80	7.65	7.21	6.57	1–9
Reputational ideal public self	8.80	9.17	9.19	8.43	1–12
Activity self-description	4.87	<u>6.24</u>	5.35	4.72	1–12
Activity ideal private self	3.98	<u>4.82</u>	4.26	3.89	1–12
Power/evaluation self-description	15.62	16.56	16.10	15.34	1–24
Power/evaluation ideal private self	19.95	20.62	20.43	19.56	1–24

Note: Variables underlined indicate Significant differences

ideally wished to be described as mean, nasty, and breaking the rules significantly more than did participants in the not-at-risk group.

For gender, significant differences were evident for reputational self-perception and reputational ideal public self with mean scores (see Table 4.4) indicating that boys reported significantly higher mean scores for reputational self-perception and reputational ideal public self. That is, boys perceived themselves as tougher, more popular, and more of a leader than did their female counterparts and ideally wished to be perceived in the same way. This dispositional use of reputational information is also evident in young boys aged around 5 years, where relative to them “girls rated popular peers as more friendly, more helpful, and more liked, and unpopular peers as more likely to get angry, fight and hurt others” (Walker & Irving, 1998, p. 7). Houghton and Carroll (2002) also found gender differences in reputational profiles among early high school adolescents (12 and 13 years old). For example, male participants perceived themselves as tougher, more popular, and more of a leader than did their female counterparts and ideally wished to be perceived by others in the same way. This ties in with the goals set by males (physical and self-presentation goals) and demonstrates the importance of social status within the peer group to them.

Although our research was with preadolescents, our findings support and extend the work of Emler and colleagues (Emler, 1984, 1990; Emler & Reicher, 1995; Hopkins & Emler, 1990; Reicher & Emler, 1986) who proposed that different adolescents are concerned about sustaining different kinds of reputations. That is, they choose a particular self-image they wish to promote; an audience is necessary to develop and maintain this social identity; the peer group is the most influential audience; and the social goal of a delinquent is to have a public delinquent reputation. Thus, through our research, we have confirmed that different young people have different goals with respect to reputations and have also extended the findings of Emler and colleagues by showing that the patterns can be detected earlier. In addition to this and the earlier work of Carroll (1995), these findings demonstrate that gender differences exist in the type of reputations sought and that the process of initiation of a particular reputation begins much earlier than adolescence. Reputation enhancement is a dynamic process that begins in primary school-aged children and continues thereafter.

## **Concluding Comments**

In this chapter, we highlighted that for many children, the final years of primary school are particularly important for the initiation of a particular reputation of choice. While there were no clear differences evident between at-risk and not-at-risk children in terms of delinquent goals, at-risk children ideally wished to be perceived as bad, troublemakers, bullies, breaking rules, doing things against the law, and getting into trouble with the police. They also admired socially

deviant activities such as bullying, smoking cigarettes, truanting, and stealing money and described themselves, and ideally wished to be described, as mean, nasty, and breaking the rules.

For the at-risk children who indulge in the kinds of socially deviant activities mentioned above, many are committed in the presence of a deviant peer group with similar antisocial attitudes who provide positive feedback and subsequent kudos and reputation. As we proposed in the introduction to this chapter, the successful execution of these activities is important for initiating the reputation of choice among these at-risk children. Hopkins and Emler (1990) demonstrated that there is an increase in routine contact with like-minded peers during the latter years of primary school. As discussed in this chapter, at this time there is also a steep rise in suspensions from school for highly visible socially deviant activities such as physical and verbal assault of teachers and peers.

Our research has established that differences exist in the goal orientations of at-risk and not-at-risk primary school-aged children and that these differences appear to be related to Academic Image and Social Image. During the high school years, adolescent peer networks exert great influence on the decisions and behaviors of young people, particularly in relation to the image they wish to portray. In the next chapter, we examine how during this peak period for engagement in delinquent activities, adolescents use a variety of activities to accelerate and firmly establish their social identities. This is particularly evident in school where behavior-management systems implemented to manage the behavior of these students actually assist them (the students) to promote their nonconforming identity and thereby promote their reputation of choice.

## Chapter 5

# Adolescents at Risk: Establishing Goals and Reputations

The initiation of social reputations during the primary school years was the focus of the previous chapter. In this chapter, we turn our attention to how early- to mid-adolescents at risk continue their transition toward delinquent status. For those who do follow this pathway, teacher- and school-based behavior-management strategies often provide an ideal means to establish a nonconforming status and image among the peer group. This chapter presents the rationale and accompanying empirical evidence that shows how goal setting and reputation enhancement accelerate during adolescence, the peak period for engagement in delinquent activities (see Emler & Reicher, 1995, 2005; Houghton, Cordin, and Hopkins, 2007; Oyserman & Saltz, 1993).

During the adolescent phase of the life span, individuals make important choices and commitments with long-term consequences for their lives (Durkin, 1995; Nurmi, 1991b; Oyserman & Markus, 1990). Individuals determine how they relate to society, establish social and academic reputations, and set goals for their futures (Agnew, 1991; Emler & Reicher, 1995). For many adolescents, successful execution of illegal acts is rewarding in terms of the status it affords in the eyes of their peers (Agnew, 1991; Carroll et al., 2003; Carroll, Hattie, et al., 2001; Carroll, Houghton, et al., 1999; Emler, 1984, 1990; Emler & Reicher, 1995; Houghton & Carroll, 1996; Oyserman & Saltz, 1993). This in turn suggests that, for some young people, delinquent activity is goal directed, and there is evidence that for some groups, delinquent goals are consciously set and valued (Carroll et al., 1997) in order to establish a particular social identity.

According to Reputation-Enhancement Theory, which was discussed in detail in Chapter 2, the maintenance and enhancement of a reputation is vital to all adolescents. It was emphasized in Chapter 2 that reputations depend on the visibility to others of a person's attributes and actions and the presence of an audience, particularly one comprising peers. For people who have prospects of achievements within the prevailing social order, the criteria of a good reputation will be consonant with those of the system, such as success at school and career advancement. Other young people may perceive or experience these options as closed to them; their response is to seek to establish a self-enhancing

reputation through other means and with reference to other criteria. For some, delinquent behaviors may be attractive because they offer a route to self-protection and standing among the peer community that would be otherwise denied (see also Agnew, 1991). In short, delinquency becomes a deliberate goal or choice, selected in order to achieve a particular social identity (Oyserman & Saltz, 1993).

Many young people choose to build their reputations by selecting and accomplishing very specific and challenging goals (which, for reasons discussed above, happen to be nonconforming). The contents and specificity of these goals, the individual's commitment to them, and the feedback received concerning progress are all held to influence outcomes. The more specific the goals in any behavioral domain, then the higher the probability of feedback (Locke, 1991; Locke & Latham, 1990, Locke, Shaw, Saari, & Latham, 1981). The junior high school context provides numerous opportunities and preferred audiences for individuals to receive highly visible feedback that establishes and further enhances the reputations that they initiated earlier in the primary school years. Nowhere is this more evident than in the classroom and broader school setting where conventional behavior-management strategies implemented to encourage appropriate behavior are actually used by young people at risk to develop a nonconforming reputation and hence gain success through enhanced kudos among peers.

### **Using Behavior-Management Systems to Enhance Reputations**

Previous research has provided support for the effectiveness of whole school and both individual and group classroom-based behavior-management strategies (Cipani, 2007; Infantino & Little, 2005). Among the most frequently cited examples of behavior-management strategies are the good-behavior board game (Cipani, 2007; Infantino & Little, 2005), behavioral contracting (Roberts, White, & McLaughlin, 1997), incident barometer programs (Truchlicka, McLaughlin, & Swain, 1998), in-class time-out (Yeager & McLaughlin, 1995), removal from classroom time-out (Algozzine & Kay, 2002), positive compliance (Ardoin, Martens, & Wolfe, 1999), beeper systems (Henderson, Jenson, & Erken, 1986), backup reinforcers (Zarcone, Fisher, & Piazza, 1996), the good-student game (Babyak, Luze, & Kamps, 2000), negative reinforcement (Pfiffner & O'Leary, 1987), token economies (Lucker & Molloy, 1995), and reinforcement and punishment (Little, Hudson, & Wilks, 2002). Although research has examined both teachers' and students' attitudes to the effectiveness of different incentives and deterrents (see Infantino & Little, 2005), what has not been explored is whether some aspects of these strategies are only partially effective in the desired direction, sometimes having the reverse effect and actually assisting young people at risk to achieve their goals of establishing a nonconforming social identity among their peers.

Houghton and Carroll (1996) found that this was indeed the case. We conducted an interview-based study involving 30 male high school students (age range 13 years 4 months to 16 years 7 months) classified as “at risk” and who had been suspended at some time during the school year for their inappropriate behavior (e.g., continual disruption of teaching, threatening other students). Information was sought pertaining to classroom teachers’ initial reactions to antisocial behavior and the behavior-management strategies they progressively used as the conflict situation between them and the student unfolded. We also examined the effect the behavior-management strategies had on the adolescents concerned and whether these strategies provided opportunities to them to enhance their reputations. As themes arose during the interviews, the interviewer used probing questions to encourage participants to describe their experiences in detail and to constantly press for clarification of their words. All of the interviews were audio-recorded and lasted approximately 30 minutes. Interrater reliability of the accuracy of transcribing the interview data, established by having a second person listen to audio-recordings, was 98%.

Twenty-six of the 30 students stated that they got into trouble deliberately. Furthermore, all nonconforming activities of these individuals were very public and visibly displayed, which ensured that teachers responded to them in a very public and visible manner. More than 75% of the participants stated that to initiate conflict with a teacher in the public arena of the classroom was a specific goal. Moreover, there appeared to be a hierarchical structure to the types of responses that the students sought to elicit from their teachers. Initially, students engaged in inappropriate behavior in order to elicit a highly public, verbal response from their classroom teachers. Their continued misbehavior then resulted in teachers placing them outside the classroom door in full view of other students and educators using the corridors. As stated by one 14-year-old male, “I try to get the teacher going. I can feel all of my mates looking at me when I argue with the teacher. I know I win ‘cause she sends me out of the classroom, then I can have some real fun.”

When this strategy failed (because the student continued to disturb the teaching by tapping on windows, making faces at others in class, etc.), the teacher sent the student to the deputy principal’s office, which as in all of the schools involved was located in the busiest and most highly visible section of the administration block. Many other students passed through this area throughout the time that our participants were waiting. In the majority of instances, this provided a means of communication with peers where details of the reason why “they were here” could be given. As demonstrated by one 14-year-old and one 15-year-old male, respectively: “Other kids out of lessons ask me what I’ve done and so I tell them. I know that they tell their mates. Some don’t say anything but I know what they’re thinking because of the looks they give me”. “It’s amazing really how many people come past you when you’ve been kicked out of a lesson. Some stop and have a chat, some just ask a question, and some just walk.”

Time-out was mentioned by teachers as a management strategy used against 20 of the 30 young adolescents in our study, but far from being “time-out from positive reinforcement” it actually became (with these students) an instrument *of* positive reinforcement. This strategy created competition between the adolescents, including who could be sent to time-out: the quickest, the most frequently, and who could stay there the longest. This actually assisted in establishing the desired reputation of choice.

After-school management strategies such as detention were also popular among the young persons in our study who were seeking to establish a non-conforming reputation. The younger 13- and 14-year-old at-risk participants stated that detention “helped them to make new friends.” Locating a number of individuals with similar goals in the same room creates a social identity and allows like-minded others to communicate their reputations among one another. The ultimate goal of these early adolescents was to be suspended from school because of the kudos it generated among both the conforming and nonconforming at-risk peer group. What came through very clearly from all of the young adolescent at-risk participants during the interviews was that many of the different behavior-management strategies used in schools to curb disruptive behavior actually enhanced the reputation of these individuals among peers. Hence, it appears that these strategies may not have their intended effect but rather enhance nonconforming reputations among students at risk.

In a study that replicated the interviews but with 15 at-risk adolescent girls (Martin, 1997), these at-risk girls were found to similarly manipulate the behavior-management systems used by teachers and schools but they did so using more covert forms of misbehavior while deliberately avoiding acting out behaviors for fear of damaging their reputations. As summarized by one of the girls, “The boys swear a lot in front of teachers. They just tend to show off in front of their mates. Like I find a lot with my friends, we’ll muck around a lot but we don’t go to extremes just to be cool. We don’t go full on like the boys.” In addition, these adolescent girls commented that “If I get sent out of the classroom, I walk out laughing whereas the boys walk out swearing.” In using these less extreme unacceptable behaviors, these at-risk adolescent females recognized that teachers “give more latitude.” They also regarded their general misbehavior as “mucking around and good-humored.” Overall, the most significant reason used by these adolescent at-risk girls to explain why behavior-management strategies are unsuccessful is that they (the strategies) actually provide the opportunities for the highly visible actions they (the girls) need to portray to enhance their reputations of choice among peers. In conclusion, Martin (1997) found that at-risk females have a different code of behavior from at-risk males that restrains them from engaging in more overt forms of unacceptable behavior (e.g., swearing at the teacher, fighting) for fear of damaging their reputations among their peers. It would appear that at-risk girls pay heed to the mantra that reputations take a lifetime to build, but only a few seconds to destroy.

## Trajectories of Delinquent Activity Among at-Risk High School Students

How do the delinquent behaviors of adolescents at risk change over time? Few studies have examined the longitudinal nature of this during the critical developmental period of early to middle adolescence. The landmark longitudinal investigation, the Cambridge Study (Farrington & West, 1990), tested and interviewed participants at a number of points in time from the ages of 8 to 32 years. The self-report data revealed that rates of delinquent activity between the ages of 10 and 18 years increased for theft, drug use, vandalism, and public disorder offenses, including assault. Farrington (1986) and Farrington and West (1990) concluded that the causes of adult criminal convictions can be traced back to childhood, with the best predictors of convictions at age 14–16 years being troublesome behaviors at age 10–13 years and daring behavior at age 8–10 years. Moreover, the juvenile delinquents and troublesome boys in the Cambridge Study were those who had experienced school failure at an early age.

The Australian Temperament Project (ATP) used a self-report questionnaire in the Australian state of Victoria with a cohort of families through infancy and adolescence (ages 13, 15, and 17) (Smart, Vassallo, Sanson, & Dussuyer, 2004). Overall, almost 50% of the adolescents in each age range committed antisocial acts. Twelve percent were classified as persistent offenders (i.e., committed at least three antisocial acts in the last 12 months), with the majority being males (65%). In early adolescence, fighting, alcohol use, and thefts were the most common forms of antisocial behavior, whereas in late adolescence, the use of alcohol and tobacco, nonattendance at school, fighting, and property damage were the most reported antisocial behaviors. With reference to age-related trends, fighting was slightly more common in the 13- to 14-year-old individuals. Damage to property, shoplifting, and theft peaked at 15–16 years of age. Physical assaults emerged in late adolescence. At 17–18 years of age, antiauthoritarian behavior, absenteeism from school, and use or selling of substances (e.g., alcohol, cigarettes, and marijuana) were extremely common. Males outnumbered females for involvement in all delinquent activities at all age ranges, except for substance use, where no differences were evident.

That fighting appears to be the early stage of a linear trajectory toward delinquency, which begins in the school context, has been confirmed in our most recent empirical research employing Rasch Unidimensional Models for Measurement (RUMM2020) (Andrich, Sheridan, & Luo, 2006). Data from 1459 at-risk, not-at-risk, and incarcerated adolescents showed that taking part in a fist fight in which a group of people are against another group is one of the first antisocial acts in which students at risk become involved. Many at-risk young people then typically progress through a trajectory involving damaging school property, committing break-and-enters, making abusive phone calls, using a weapon, using force for extortion purposes, engaging in motor vehicle offenses, through to the extremes of hard drug use (e.g., heroin)



and deliberately starting fires. Of particular interest is that our Rasch analysis revealed that arson was late emerging in this group of young persons, whereas it is often cited elsewhere as a serious negative indicator that appears in childhood (Epps & Hollin, 2000; Kolko & Kazdin, 1991, 1992, 1994).

We believe that this type of analysis is important in examining trajectories, as a key property of the Rasch model is that it allows assessment of whether the data provide evidence for a latent, unidimensional construct. Rasch measurement models afford a powerful technique by which one can create linear, objective measures applicable to the human sciences (Wright, 1999). Rasch is based on the assumption that data must conform to some reasonable hierarchy of less than/more than on a single continuum of interest. This idea of measuring a single variable is depicted with a map of person and items on the same scale. The model specifies the form of the relationship between persons and the items that operationalized one trait. This means that the likelihood of higher scores increases as people have more of the trait and decreases as they have less of the trait, whereby items become more difficult to endorse. The Rasch model assumes that item responses are governed by a person's position on the underlying trait and item difficulty (Njiru & Waugh, 2007).

A number of trends pertaining to the developmental trajectories to delinquency were also identified by Houghton and Carroll (2002) who tracked 249 13- to 15-year-old adolescents over 3 years. Longitudinal self-report data revealed individuals at risk (particularly of dropping out of school) were significantly more involved than were their not-at-risk counterparts in all categories of delinquency, with the exception of assault. Furthermore, involvement in delinquency increased from 13 to 15 years of age. During this period, there was a sixfold increase in purchasing alcohol, almost a fourfold increase in drinking alcohol in public places, and a threefold increase in using marijuana. For more serious delinquent activities, there was nearly a threefold increase in driving a car at high speeds in the city, and peddling drugs increased more than 2.5 fold.

## **Reputational Profiles of Young Adolescents**

The delinquent activities in which young persons indulge and the ways in which they use the behavior-management systems inherent in school contexts were described earlier in this chapter. We also detailed how a linear trajectory toward delinquency begins, more often than not in the school context, through fist fights and then by involvement in other delinquent behaviors. Given that the majority of young adolescents at risk are striving to attain a specific reputation, it is important to understand reputational profiles and how they differentiate involvement in these various delinquent activities. Thus, the primary focus of this section of the chapter is the reputational orientations of high school adolescents deemed as at-risk.

As documented in Chapter 2, peer groups play a fundamental role in the development of social reputations during adolescence and exert a great deal of

influence over the type of reputation an individual manifests. Delinquent adolescents have been documented by Carroll et al. (1996, 1997, 2003), Carroll, Houghton, et al. (1999), Carroll, Hattie, et al. (2001), Emler (1984), and Emler and Reicher (1995, 2005) to be concerned with establishing and maintaining their delinquent credentials to the in-group and establishing and maintaining a bad reputation to outsiders.

*Reputation Enhancement and Level of Delinquency Involvement.* If reputational goals – specifically, achieving and maintaining a “bad” reputation – are motivating to delinquent youths, then it follows that those with a higher level of involvement should more strongly express or endorse a desire for a nonconforming reputation. However, little research has investigated whether students identified as having high involvement in delinquency desire a more nonconforming reputation than do those with low involvement.

Carroll et al. (2003) surveyed 965 adolescents (467 males, 498 females) aged 12–18 years in two capital cities of Australia. Based on our self-report delinquency (using the *Adapted Self-Report Delinquency Scale* (Carroll et al., 1996; see Chapter 3 for a description), these young people were divided into either high involvement or low involvement in delinquent behaviors. These individuals then completed the *Reputation-Enhancement Scale* (Carroll, Houghton, et al., 1999; see Chapter 3 for a description).

As shown in Table 5.1, 10 of the 16 reputation variables were significant in terms of adolescents with high versus low involvement in delinquency. Specifically, those with high involvement in delinquency admired socially deviant activities (e.g., fighting, stealing, drug taking) more so than did those with low involvement in delinquency. Furthermore, those with high involvement perceived themselves as nonconforming (e.g., breaking rules, bad reputation) and ideally wanted to be perceived in this manner. They informed peers of their behavior, but not adults. These results support Emler (1990) and Carroll (1995) who found that delinquents, who desired a nonconforming reputation, participated in activities that supported a nonconforming reputation and communicated behavior supporting their reputation to peers. Conversely, those with low delinquency involvement perceived themselves and ideally wanted to be seen as conforming (trustworthy, likely to succeed, getting along well with others). They described themselves in terms of power/evaluation attributes (e.g., leaders, good looking) and activity attributes (kind, friendly). Ideally they wanted to be described as people who do not break the rules, are smart, and are kind. They communicated prosocial behavior (e.g., receiving a certificate, a good grade) to others (e.g., peers, parents, and other adults) and admired socially conforming activities (e.g., obeying parents, good grades).

*Reputation Enhancement, Gender, and Level of Delinquency Involvement.* When examining adolescent boys’ and girls’ reputational orientations and delinquency involvement together, although there were no statistically significant interaction effects, there were main effects for Gender  $F(16,891) = 8.04$ ,  $p < .001$  with 10 of the 16 reputation variables being statistically significant between males and females (see Table 5.2).

**Table 5.1** Univariate *F* statistics, observed means, and standard deviations for the 16 reputation-enhancement variables (*df* = 1906) with delinquency involvement as the independent variable

Dependent variable	Mean squares	<i>F</i> value	<i>p</i> value	Effect size	High involvement		Low involvement	
					M	SD	M	SD
Sociability	.41	.68	.41	.00				
Admiration of social conformity	1.88	2.32	.13	.00				
Admiration of social deviance	44.94	63.29	<.001	.07	3.17 <sub>a</sub>	.11	2.26 <sub>b</sub>	.03
Reputational self-perception	33.74	28.54	<.001	.03	4.01 <sub>a</sub>	.14	3.21 <sub>b</sub>	.04
Nonconforming self-perception	221.93	338.27	<.001	.27	3.83 <sub>a</sub>	.11	1.79 <sub>b</sub>	.03
Conforming self-perception	11.4	17.6	<.001	.02	4.4 <sub>a</sub>	.11	4.8 <sub>b</sub>	.03
Reputational ideal public self	4.8	3.33	.07	.00				
Nonconforming ideal public self	108.58	132.18	<.001	.13	3.08 <sub>a</sub>	.12	1.65 <sub>b</sub>	.03
Conforming ideal public self	10.64	15.94	<.001	.02	4.65 <sub>a</sub>	.11	5.1 <sub>b</sub>	.03
Activity self-description	80.76	142.47	<.001	.02	3.45 <sub>a</sub>	.11	4.69 <sub>b</sub>	.03
Power/evaluation self-description	3.72	5.96	.02	.01				
Activity ideal private self	53.22	90.81	<.001	.91	4.34 <sub>a</sub>	.10	5.34 <sub>b</sub>	.03
Power/evaluation ideal private self	.08	.01	.91	.00				
Adult communication	.08	2.84	.09	.00				
Prosocial communication	.99	28.03	<.001	.03	.50 <sub>a</sub>	.03	.64 <sub>b</sub>	.01
Peer communication	1.96	18.10	<.001	.03	.57 <sub>a</sub>	.03	.38 <sub>b</sub>	.01

*Note:* Means within rows having no common subscript letter differ at  $p < .01$ . *F* values determined to be significant at  $p < .01$  to control for type I errors.

Females placed more value on friendship and group membership, admired socially conforming activities more than did males (returning what they have borrowed, obeying parents, receiving good grades), perceived themselves to be more conforming (get along well with others, have a good reputation), would ideally like to be perceived by others as conforming (trusting, good), described themselves with positive attributes (kind, friendly), and communicated more with adults and parents than did males. Thus, females reported a higher desire than did males for a conforming reputation and were more likely to participate in activities that supported this reputation. In comparison with their

**Table 5.2** Univariate *F* statistics, observed means, and standard deviations for the reputation-enhancement variables (*df* = 1906) with gender as the independent variable

Dependent variable	Mean squares	<i>F</i> value	<i>p</i> value	Effect size	Male		Female	
					M	SD	M	SD
Sociability	13.12	21.54	<.001	.02	3.65 <sub>a</sub>	.06	4.15 <sub>b</sub>	.09
Admiration of social conformity	22.68	27.9	<.001	.03	3.00 <sub>a</sub>	.07	3.66 <sub>b</sub>	.10
Admiration of social deviance	5.5	7.75	<.005	.01	2.88 <sub>a</sub>	.06	2.56 <sub>b</sub>	.10
Reputational self-perception	.02	.001	.97	.00				
Nonconforming self-perception	2.37	3.61	.06	.00				
Conforming self-perception	4.92	7.59	<.006	.01	4.44 <sub>a</sub>	.06	4.74 <sub>b</sub>	.09
Reputational ideal public self	5.44	3.78	.05	.00				
Nonconforming ideal public self	17.12	20.84	<.001	.02	2.65 <sub>a</sub>	.07	2.1 <sub>b</sub>	.10
Conforming ideal public self	13.05	19.54	<.001	.02	4.63	.06	5.13	.09
Activity self-description	4.64	7.9	<.005	.02	4.03	.06	4.11	.05
Power/evaluation self-description	8.27	13.25	<.001	.01	2.81	.06	3.21	.09
Activity ideal private self	4.64	7.9	<.005	.01	4.7	.06	5.0	.09
Power/evaluation ideal private self	.01	.12	.89	.00				
Adult communication	.09	3.97	.05	.00				
Prosocial communication	.40	11.35	<.001	.01	.52	.01	.61	.02
Peer communication	4.87	.43	.51	.01				

*Note:* *F* values determined to be significant at *p* < .01 to control for type I errors.

female counterparts, males were identified as having a higher admiration for socially deviant activities (e.g., dealing drugs, stealing, truancy, taking drugs), perceived themselves to be nonconforming (e.g., breaking rules, getting into trouble), and reported informing their peers of their nonconforming behavior. Males would ideally like to be perceived as tough, leaders, and popular (see Table 5.2). It appears on the face of it, therefore, that males are *more* interested than are females with attaining and maintaining a nonconforming reputation.

However, as demonstrated in our most recent research (Carroll, Houghton, Khan, & Tan, 2007), it may not be as straightforward as this. In line with their higher involvement in delinquency, males *do* indeed seek to attain a more

nonconforming reputation compared with their female counterparts (see Carroll, 1995; Carroll, Baglioni, et al., 1999; Carroll et al., 2003; Carroll, Houghton, et al., 1999). When a matched sample of at-risk and not-at-risk females was compared, however, the at-risk females appeared no different to their at-risk male counterparts. That is, they expressed an admiration of socially deviant activities and wished to be seen by their friends as bad, getting into trouble, breaking the rules, and as being tough. These at-risk females committed significantly more delinquent activities than did their not-at-risk female counterparts, with the exception of school misdemeanors. This was not the case, however, when a matched sample of at-risk males and not-at-risk males was compared. In this instance, the at-risk males committed significantly more delinquent activities, including school misdemeanors. This supports the findings we referred to earlier by Martin (1997) showing that at-risk girls deliberately avoid overt types of inappropriate behaviors in school for fear of damaging their reputation.

*Reputation Enhancement, Age, and Level of Delinquency Involvement.* Returning to Carroll et al. (2003), in order to examine the effects of age and level of delinquency involvement on reputational orientations, adolescents were assigned into groups based on age as follows: 12–14 years or 15–17 years. A significant interaction effect for age by delinquency involvement was found,  $F(16,891) df=3.34, p < .001$ , with 3 of the 16 reputation variables being significant (see Table 5.3).

Adolescents aged 12–14 years were most concerned with their nonconforming reputations. Compared with 15-year-old adolescents, the 12- to 14-year-old adolescents admired socially deviant activities, perceived themselves to be tough, leaders, popular, and nonconforming (e.g., troublemakers). There were some 12- to 14-year-old adolescents, however, who perceived themselves as conforming (e.g., having a good reputation). Because most 12- to 14-year-old individuals are in the initial stages of adolescent development, the choice of a conforming or nonconforming reputation assumes increasing importance, adding support to Emler's (1990) contention that reputations become highly important at the onset of adolescence.

Examining reputational differences according to age, 17-year-old individuals ideally liked to be described as leaders and as powerful, more so than 12- to 16-year-old individuals. Thirteen-year-old individuals reported least concern for a nonconforming reputation and preferred to be seen by others in terms of activity attributes (e.g., kind, smart, and friendly); they also described themselves in this way. As students in their first year of high school, 13-year-old individuals may be finding their place in the system and doing their best to conform to the socially accepted norms promoted by the school. Additionally, they may not have been exposed extensively to forms of nonconforming behavior, such as delinquency involvement, because this increases during high school (Emler, 1984). Peer communication of nonconforming deviant behavior was greatest for 14- to 16-year-old individuals, which is consistent with Emler's (1984, 1990) assertion that once a reputation has been established, its

**Table 5.3** Univariate *F* statistics, observed means, and standard deviations (in parentheses) for the interaction effect between age and delinquency involvement for the reputation-enhancement variables (*df* = 1906)

Dependent variable	Mean square	<i>F</i> value	<i>p</i> value	Effect size	Low involvement		High involvement	
					12-14 years	15-17 years	12-14 years	15-17 years
Sociability	1.75	2.72	.09	.003				
Admiration of social conformity	3.72	4.24	.04	.005				
Admiration of social deviance	5.37	7.55	.01	.008				
Reputational self-perception	6.82	5.78	.02	.006				
Nonconforming self-perception	11.76	17.92	<.001	.019	1.79 (.03)	1.73 (.05)	4.19 (.12)	3.21 (.17)
Conforming self-perception	8.12	12.20	<.001	.013	4.8 (.03)	4.9 (.05)	4.5 (.12)	3.9 (.17)
Reputational ideal public self	2.61	1.79	.18	.002				
Conforming ideal public self	2.47	3.55	.06	.004				
Activity self-description	2.90	5.13	.02	.001				
Power self-description	1.07	1.66	.20	.002				
Activity ideal private self	3.80	6.45	.01	.007				
Power/evaluation ideal private self	.15	.24	.63	.000				
Adult communication	.02	.72	.40	.001				
Prosocial communication	.09	2.50	.11	.003				
Peer communication	4.55	.42	.52	.001				

*Note:* *F* values determined to be significant at *p* < .01 to control for type I errors.

maintenance is of critical importance. To do this, adolescents must behave in a manner consistent with this reputation and/or communicate this behavior to others.

## Reputation as Goal-Directed and Deliberate Choice

We originally presented an integrated theory of goal setting and reputation enhancement as an alternative explanation of delinquency, fusing a social-psychological approach. Evidence indicates that many adolescents find that successful execution of illegal acts is rewarding in terms of the status it affords in the eyes of their peers (Agnew, 1991; Carroll, Houghton, et al., 1999; Emler, 1984, 1990; Emler & Reicher, 1995, 2005; Houghton & Carroll, 1996; Oyserman & Saltz, 1993). This in turn suggests that, for some young people, delinquent activity is goal directed, and there is evidence that for some groups, delinquent goals are consciously set and valued (Carroll et al., 1997). Thus, the relationships that exist among reputation, goal setting, and delinquent behavior in adolescents may be crucial in understanding the motivational determinants for engagement in delinquent activities (see Emler & Reicher, 1995; Oyserman & Saltz, 1993).

As we suggested in Chapter 2, some adolescents are vulnerable to delinquency but have yet to acquire the status of delinquent. We have presented powerful evidence showing that these at-risk adolescents are distinguishable from delinquents in that they are in an intermediate transitional state whereby high levels of commitment to age-related developmental goals are diminishing and the setting of and commitment to alternative (delinquent) goals are becoming more attractive. Family background is very well established as one of the critical demographic variables related to delinquency (Farrington & West, 1990; Loeber & Stouthamer-Loeber, 1986). Ethnicity is equally well established as an important factor, with some ethnic minority groups at significantly higher risk of involvement in, or punishment for, delinquency in Western societies (Ferrante, Loh, & Maller, 1998; Haney & Zimbardo, 1998; Harding & Maller, 1997; Johnston, 1991; Wilkie, 1991).

We administered three scales (*Adapted Self-Report Delinquency Scale*, *Importance of Goals Scale*, *Reputation-Enhancement Scale*; see Chapter 3 for a description) to 260 adolescent males (80 incarcerated delinquent, 90 at risk, and 90 not at risk) ranging in age from 12 to 18 years in order to investigate the relationships among the components of our Reputation-Enhancing Goals Model. Of the incarcerated delinquent sample, 59% were of Indigenous (Aboriginal) descent compared with 17% in the at-risk group and 6% in the not-at-risk group. The proportions of Indigenous persons in the three groups were found to be significantly different ( $\chi^2 = 68.61$ ,  $df = 2$ ,  $p < .001$ ) and necessitated that group differences be investigated according to ethnicity (Indigenous, non-Indigenous). As we stated earlier, some ethnic minority

groups are at significantly higher risk of involvement in or punishment for delinquency in Western societies. In Australia, for example, Aboriginal young people are at particular risk (Harding, 1993); although 10- to 17-year-old Aboriginal Australians constitute only 4% of the population, 31.5% of juvenile convictions are of Aboriginal youths. Aboriginal youths are also more likely to be given a custodial sentence (33% of Aborigines processed by the juvenile justice system compared with approximately 23% of non-Aborigines; Ferrante et al., 1998). The explanation of ethnic differences in arrest and conviction rates is controversial (Hindelang et al., 1981) but appears to involve biases in the justice system, cultural differences between majority and minority groups, and risk factors associated with economic disadvantage. Hence, Aboriginal young people would be expected to be more likely to respond to the context of disadvantage and prejudice by seeking to establish and maintain strong peer relations and tough, nonconforming reputations.

Population figures show that of Western Australian 10- to 17-year-old high school students, 4% are of Indigenous descent (Ferrante et al., 1998). Thirty percent of members of the incarcerated delinquents were living in a two-parent family compared with 49% of the at-risk group and 72% of the nondelinquent group. These proportions of participants from two-parent and non-two-parent families in the three groups were significantly different ( $\chi^2 = 30.36$ ,  $df = 2$ ,  $p < .001$ ) and necessitated that group differences be investigated according to family structure (two parent, non-two parent).

From the three scales administered, exploratory and confirmatory factor analyses derived 30 first-order factors from the scales, comprising seven factors from the Adapted Self-Report Delinquency Scale, 15 factors from the Reputation-Enhancement Scale, and eight factors from the Importance of Goals Scale. A maximum-likelihood confirmatory factor analysis was undertaken using MICFA (Multiple Indicator Confirmatory Factor Analysis Krakowski & Hattie, 1993) to confirm the second-order factor structure. The Tucker-Lewis index was found to be greater than .9, and the factor loadings were all statistically significant, and all items loaded meaningfully on their appropriate factor. The analysis confirmed the existence of the following four second-order factors: self-reported delinquency (theft and burglary, motor vehicle offenses, drug-related offenses, assault, school misdemeanors, vandalism, public disorder), self-presentation (reputational public self, power/evaluation private self, self-esteem, and personal goals related to self-presentation, status, freedom/autonomy, physical activity, and interpersonal relationships), conforming reputation (conforming public identity, social desirability, social conformity norms, adult communication, and goals related to education and career aspirations), and nonconforming reputation (nonconforming public identity, activity private identity, social deviance norms, peer communication, and goals related to delinquency), indicating that they were conceptually interrelated and meaningful subsets by which to interpret the data.

*Family Structure, Ethnicity, Delinquency, Goals, and Reputations.* With respect to family structure, although there were significant differences in the family composition for each of the risk-level groups, self-reported delinquency,



importance of goals, and types of reputations of adolescents did not differ significantly as a function of family type. Regardless of whether individuals were from two-parent or non-two-parent families, adolescents set goals that were congruent with the kinds of reputations they wished to achieve. It may be that other family-related variables aside from family structure are therefore important in the development of delinquent motivation and goals. There is an association, for example, between child abuse and subsequent antisocial and aggressive behaviors (for a review, see Lewis, Mallouh, & Webb, 1989). Negative child-rearing practices involving traumatic and abusive childhood experiences have also been found to commonly occur in the lives of young people who commit crimes (Haapasalo & Pokela, 1999). Comparing backgrounds solely on the basis of family composition is not akin to measuring quality of parenting or exposure to domestic abuse.

There was a significant interaction between risk level and ethnicity for self-reported delinquency. Non-Aboriginal delinquents reported significantly more involvement in assault when compared with non-Aboriginal at-risk and not-at-risk young people and Aboriginal delinquent, at-risk, and not-at-risk young people. That is, Aboriginal youth were no more likely to report physical aggression, contrary to youths of this relatively vulnerable minority group often finding themselves forced to project a tough reputation for self-protective purposes.

For motor vehicle offenses, non-Aboriginal and Aboriginal delinquents reported significantly more involvement than did at-risk and not-at-risk groups. Aboriginal at-risk young people reported more motor vehicle offenses than did non-Aboriginal at-risk young people. It may be that this offense has a particular significance among at-risk adolescents from Indigenous backgrounds: for example, there is anecdotal evidence that car stealing is regarded among the (at-risk) peer Aboriginal community as a valued skill, a means of demonstrating one's commitment to the group, and a pragmatic adaptation to the need for transport while having low incomes (Carroll et al., 1996).

*Self-Reported Delinquency of the Three Risk-Level Groups.* For self-reported delinquency, the three groups differed significantly on six of the seven variables (motor vehicle offenses, public disorder, theft, drug-related offenses, assault, school misdemeanors), with the delinquent group reporting higher levels of delinquency than did the at-risk and not-at-risk groups, except for public disorder. For public disorder, at-risk young people scored significantly higher than did not-at-risk and delinquent young people (Fig. 5.1).

*Self-Presentation of Delinquent, at-Risk, and Not-at-Risk Young People.* For self-presentation, only self-esteem reached statistical significance, with not-at-risk young persons ( $M = 29.39$ ) scoring significantly higher than did each of the at-risk ( $M = 27.11$ ) and delinquent ( $M = 27.65$ ) groups of young people. It may be that self-esteem is relatively secure in not-at-risk youth, but the other groups indicate some problems in this respect, which raises the possibility that poorer self-esteem fuels a search for a nonconforming reputation.

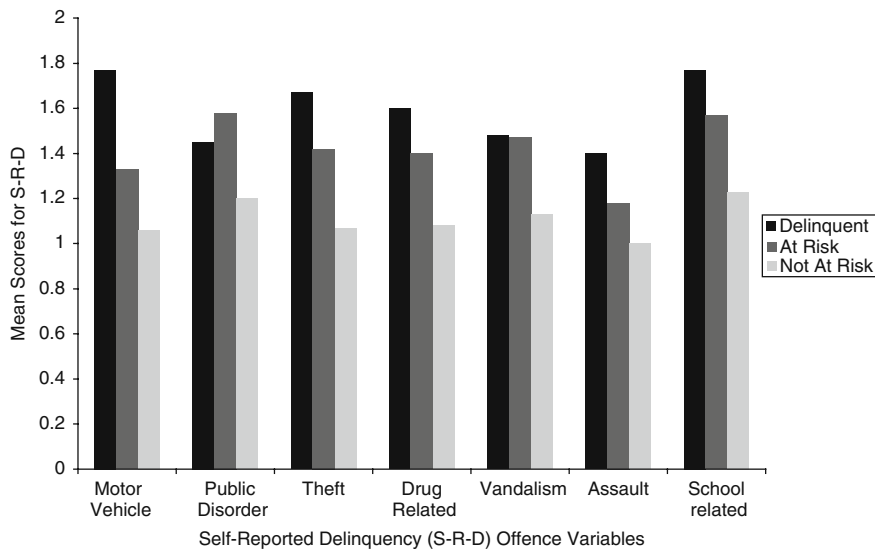


Fig. 5.1 Means for the self-report delinquency offense variables by risk level

*Conforming Reputation of Delinquent, at-Risk, and Not-at-Risk Young People.* Only educational goals reached statistical significance, with not-at-risk adolescents reporting educational goals to be significantly more important than did the other two groups. That educational goals were reported as significantly more important to not-at-risk adolescents corresponds with Nicholls (Duda & Nicholls, 1992; Nicholls, 1984, 1989) who identified higher task orientation in young people who achieve at school. Similarly, Wentzel (1989) found that the goal-setting patterns of high-achieving students were associated with knowledge and study skills and were congruent with the goals held by their educational institutions. It may be that at-risk adolescents are in a state of transitory disaffection with school and organized school activities because of the lack of importance they attach to educational goals. At the same time, the findings that at-risk adolescents reported higher educational goal orientation than did their delinquent counterparts, and that they are still attending school at least some of the time, point to the possibility that school may act as a protective factor for some young people at risk of making the transition to a delinquent lifestyle.

*Ethnicity and Nonconforming Reputations of Delinquent, at-Risk, and Not-at-Risk Young People.* There was a significant risk level by ethnicity interaction for admiration of socially deviant activities among the young people in the study, with non-Aboriginal at-risk and Aboriginal delinquent adolescents reporting the highest levels of admiration, whereas the Aboriginal not-at-risk adolescents reported the lowest levels of admiration. It may be that for Aboriginal adolescents, a “passage of rites” based on a hierarchy of socially deviant activities is in operation, as suggested by Carroll et al. (1998), but this is yet to be confirmed.

There were also significant differences among the three risk-level groups for nonconforming self-perception, nonconforming ideal public self, admiration of socially deviant activities, and delinquency goals (Fig. 5.2). Delinquent and at-risk adolescents perceive and describe themselves as having more nonconforming reputations, actively desire and seek more nonconforming reputations, wish to be perceived by others as more nonconforming, have more admiration of socially deviant activities, and place more importance on delinquency-related goals than do adolescents not at risk.

These findings provide an important indicator of the social motivations of young people at the early stages of potential criminal careers. In line with Reputation-Enhancement Theory, young people strive to be seen and valued by their peers as tough and law-breaking, and their goals are congruent with their desire to achieve a public nonconforming reputation, substantiating the importance of the overt nature of delinquent and risk-taking activities. For example, our research has shown that delinquent and at-risk young people report themselves to be nonconforming (e.g., one who breaks rules) and want to be perceived by others in this way (e.g., getting into trouble with the police, doing things against the law). They admire socially deviant activities (e.g., out-racing police cars, drug dealing), and delinquency goals are significantly more important to them than such goals are to adolescents not at risk. The importance of peer status and delinquency relative to other more conforming social and academic goals therefore calls into question the amount of effort that these adolescents are prepared to contribute to achieve their desired delinquent outcomes (Oyserman & Markus, 1998).

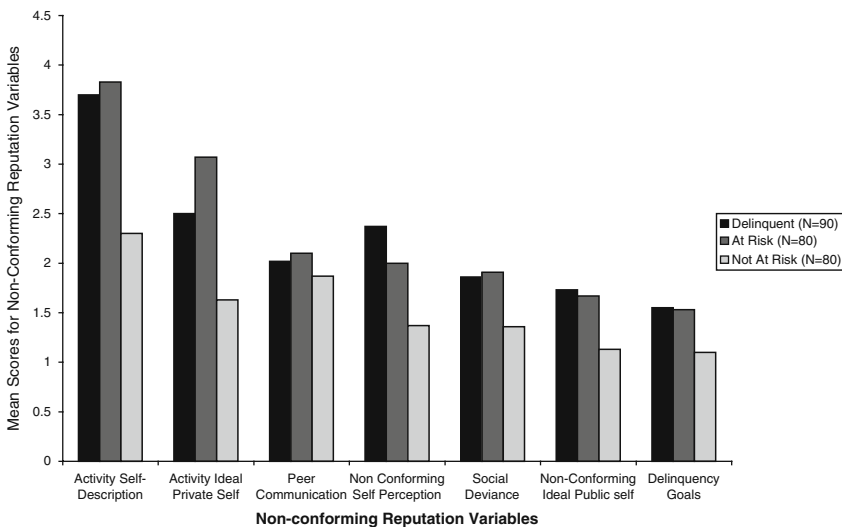


Fig. 5.2 Means for the nonconforming reputation variables by risk level

## Concluding Comments

The body of research presented in this chapter draws upon an integration of two theories. Based on Reputation-Enhancement Theory, we have demonstrated that many adolescents deliberately choose delinquency in order to attain a particular social identity. Using tenets of Goal-Setting Theory, we have further demonstrated that young people organize their behavior, including delinquent behavior, purposefully to achieve the goals commensurate with their identity aspirations and as they wish to project these identities to their peers. Peers who comprise the immediate audience provide essential feedback, which not only confirms the individual's choice of his or her own self-image, but also emphasizes to the individual the importance of visibility of actions. By making actions public, individuals commit themselves to achieving a certain reputation among peers. Inextricably linked to commitment is the degree of difficulty associated with the task in hand, which in turn influences the reputation an individual acquires. In summary, juxtaposed with earlier research (Emler, 1990; Goldsmith et al., 1989; Oyserman & Markus, 1998; Wentzel, 1989), our integrated model (Reputation-Enhancing Goals) demonstrates the importance of a nonconforming reputation to delinquents and other at-risk adolescents and shows that behaviors and values are focused on the goal of establishing and maintaining this reputation, especially in the adolescent years.

Of particular interest was the finding that Aboriginal at-risk young people reported more motor vehicle offenses than did non-Aboriginal at-risk adolescents. It may be that this offense has a particular significance among at-risk adolescents from this background as there is anecdotal evidence that car stealing is regarded among the (at-risk) peer Aboriginal community as a valued skill and a means of demonstrating one's commitment to the group (Carroll et al., 1996).

Once adolescents have made the choice to transit a pathway toward establishing a delinquent reputation, they indulge in a range of risk-taking behaviors to maintain their reputation. Moreover, the highly visible and public nature of these behaviors communicates to others, both within and outside of the peer groups, the status and intention of the young person. In the next chapter, the types of behavior in which these young persons participate (including risk taking/sensation seeking, alcohol use, substance use, solvent use, tattooing, and other body-modification practices) to maintain and communicate their status and reputation, along with the way in which their delinquent activities are stereotyped by "outsiders," will be examined in terms of maintaining reputations.

## Chapter 6

# Establishing and Maintaining Reputations Through Risk-Taking Behavior

Risk-taking behavior is defined as volitional behavior of which the outcome is uncertain and which entails negative consequences (Pat-Horenczyk et al., 2007). The number of young people at risk for adverse mental and physical health consequences because of their involvement in risk-taking behaviors (e.g., substance use, delinquency, body marking and piercing, and unprotected sexual activity) is very high (Capuzzi & Gross, 2004). This chapter examines risk-taking behaviors among young people within our *Reputation-Enhancing Goals Model* to provide an alternative explanation of why young people choose to place themselves at risk through their involvement in certain destructive behaviors. First, we provide an account of the severity of the problem among young people in Western society. Second, we provide a general introduction concerning the relationship between the Reputation-Enhancing Goals Model and adolescent risk taking. We then use a range of risk-taking behaviors to illustrate how reputations can be further established and maintained through indulging in risky activities. The perspective that we present in this chapter does not disregard that all young people have the propensity to engage in risk-taking behaviors nor does it discount the fact that for some young people, pressures to conform or not to conform are exerted from a variety of sources. From our perspective, however, the focus is on how peer influence enhances young persons' status and assists them in attaining their social identity of choice.

### The Severity of the Problem

According to researchers (Capuzzi & Gross, 2004; Kronick, 1997; Kushman, Sieber, & Hearnold-Kinney, 2000; McWhirter et al., 2007; U.S. Department of Health and Human Services, 2000), a snapshot of the situation among young persons in the United States shows that each year around 600,000 students drop out of high school, 475,000 teenagers give birth, 10,000 teenagers commit suicide, and 2.25 million are arrested (including more than 92,000 for violent crimes such as murder, aggravated assault, forcible rape, and robbery).

The 2005 U.S. Youth Risk Behavior Surveillance (Eaton et al., 2006) highlighted that the leading causes of morbidity and mortality among youth and young adults in the United States are related to unintentional injury and violence; tobacco use; alcohol and other drug use; and unintended pregnancies and sexually transmitted diseases, including HIV infection. These data were obtained from a sample of 13,933 adolescents aged 12–17 years who reported on their engagement in the four areas above in the 30 days preceding the survey.

With reference to *unintentional injuries and violence*, 28.5% had ridden in a vehicle with someone who had been drinking alcohol; 9.9% had driven a vehicle when they had been drinking alcohol; 18.5% had carried a weapon (e.g., gun, knife, club), with 6.5% having carried a weapon on school property; 5.4% had carried a gun; 35.9% had been in a physical fight, with 13.6% having been in a physical fight on school property.

In terms of *tobacco use*, 23% had smoked cigarettes and 14% had smoked cigars in the preceding 30 days, with 13.4% smoking daily. For *alcohol and other drug use*, 43.3% had at least one drink in the 30 days preceding, with 25.5% having five drinks in a row (i.e., within a couple of hours). In addition, 20.2% had used marijuana, and 3.4% had used any form of cocaine.

With regard to *sexual behaviors*, of the 34% of adolescents reporting to be currently sexually active, approximately 40% had unprotected sex during their last sexual encounter, and 23.3% had drunk alcohol or used drugs prior to sexual intercourse. Overall, on a nationwide basis, 11.9% had been tested for HIV.

In addition, the survey reported that at some time during their lives:

- 12.4% had sniffed glue or other inhalants;
- 8.5% had used hallucinogenic substances (e.g., LSD, PCP, mushrooms);
- 7.5% had been forced to have sexual intercourse when they did not wish to;
- 6.3% had used ecstasy;
- 6.2% had used methamphetamine (e.g., speed, crystal, ice);
- 4% had taken steroid pills without a doctor's prescription;
- 2.4% had used heroin;
- 1.2% had used a needle to inject an illegal drug into their bodies (Eaton et al., 2006).

Langsford, Douglas, and Houghton (1998) found that the main differences in risk-taking behaviors occurred between 12 and 18 years of age with mid to late adolescents indulging more frequently, particularly in alcohol use, cigarette use, illicit substance use, and sexual activities. It is during adolescence when substance use typically begins along with its associated health-related consequences (Bachanas et al., 2002). Of U.S. adolescents before the age of 13 years, 25.6% had drunk alcohol, 16% had smoked a *whole* cigarette, and 8.5% had tried marijuana (Eaton et al., 2006). It is not only that these risky behaviors have immediate consequences through their voluntary initiation prior to 13 years of age but also that they continue on in many cases as long-term consequences into adulthood. However, it should be acknowledged that for

some young persons who try alcohol prior to age 13, a number may have done so under the supervision of their parents; for some of these, this may be the precursor to sensible drinking patterns. The data for cigarettes and marijuana are quite different from those for alcohol and may reflect different processes of socialization. Bor, McGee, Hayatbakhsh, and Najman (2007) reported from a 21-year Australian longitudinal study that some 27.2% of persons met the DSM-IV criteria for lifetime alcohol disorders at young adulthood, 15.1% of young adults had extreme antisocial behavior, and 10.1% had committed an offense in the previous 12 months.

Adolescents' propensity to engage in risk-taking behaviors is an enduring trait that varies among individuals (Farrington, 1973; Tremblay et al., 1994) and increases across the adolescent years (Crowley, Raymond, Mikulich-Gilbertson, Thompson, & Lejuez, 2006). Positive relationships have been found between substance use and delinquency (Donovan & Jessor, 1985; Elliott, Huizinga, & Menard, 1989); substance use and low educational performance (Schulenberg, Bachman, O'Malley & Johnston, 1994); delinquency and sexual activity (Devine, Long, & Forehand, 1993; Elliot & Morse, 1989); delinquency and poor school performance (Elliot et al., 1989); and body piercing and gateway and hard drug use, risky sexual behavior, and violent behavior (Roberts, Auinger, & Ryan, 2004).

Risk-taking behavior in childhood and in adolescence are also frequently interrelated whereby an individual moves between the many forms of risk taking (e.g., Eaton et al., 2006, 1989; Jessor & Jessor, 1977; Newcomb & Bentler, 1988; Plant & Plant, 1992), which is similar to the oscillation between reputation of choice occurring during the transitory phase for many adolescents that we highlighted in Chapter 3. That is, for many young people, their social identity at this point in time remains relatively fluid, and it is involvement in risk-taking behaviors within a group of like-minded peers that is highly influential in determining their transition to social deviancy and an associated reputation.

## **Adolescent Risk Taking and the Reputation-Enhancing Goals Model**

Rodham, Brewer, Mistral, and Stallard (2006) made the point that explanations of adolescent engagement in risk taking have often focused on developmental explanations, whereby adolescents were seen as lacking in ability to make rational decisions regarding their behavior. However, in their research, which involved single-sex focus groups of students aged 16 years and older, perceived risk was seen as a challenge of "adjusting to the period of change and transition which adolescents were experiencing in all areas of their lives and implementing decisions they had made about risky behavior to which they assigned overriding importance, rather than the risky behavior itself" (Rodham et al., 2006,

pp. 269–270). Moreover, the information gained from the adolescents in this research provided support for the view that rational decisions were based on an appreciation of the risk involved. Indeed, according to the participants, there were instances where they (adolescents) “might be tempted to engage in risky behavior, and this was a decision that was entered into as a result of careful weighing up of the options available to them and considering the possible costs and benefits” (Rodham et al., 2006, p. 270).

Pat-Horenczyk et al. (2007) also viewed risk-taking behavior as functional and goal directed and as playing an important part in adolescent development. Koch, Roberts, Cannon, Armstrong, and Owen (2005) argued that individual identities develop among a complex of social pressures both to conform and to act out against prevailing norms. As young persons approach early adulthood, they decide how they wish to present themselves to others and assess the costs of this by gauging the reactions they get.

Factoring into the decision-making process for these adolescents is the choice between rejection by parents/other authority figures and acceptance by peers. It is involvement in particular risk-taking behaviors that we argue not only maintains but accelerates the early adolescent’s choice of reputation into a conforming or nonconforming social identity; this is determined by the young person’s goal-directed behavior, the reputation that is desired from these goals, and the feedback received from the peer audience. To use or not use substances, commit or not commit offenses, indulge or not indulge in sexual activity, or modify or not modify themselves through body tattooing or piercing is not simply an expression of identity but an active strategy to ground identity. That is, as adolescents in the Rodham et al. (2006) study highlighted, they just wanted to fit in, be part of the group, and stay part of the group “even if it makes me take drugs, or have piercings, or whatever, for the rest of my life” (p. 269). One of the most reliable correlates of adolescent risk taking is whether or not friends also engage in these activities. Adolescents do not do things when they believe it will have no repercussions for their reputations, but because they hope it will (Hopkins & Emler, 1990).

## **Substance Use and Reputations**

In the 2006 National Survey on Drug Use and Health (NSDUH) conducted by the Substance Abuse and Mental Health Services Administration (2007), 67,500 young persons aged 12–17 years were interviewed on their use of nine different categories of illicit substances. Findings revealed that 1 month prior to the survey, 9.8% were currently using illicit drugs. (Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically). As shown in Fig. 6.1, marijuana, prescription-type drugs used nonmedically, and inhalants were the most frequently used substances among 14- to 17-year-old individuals, with



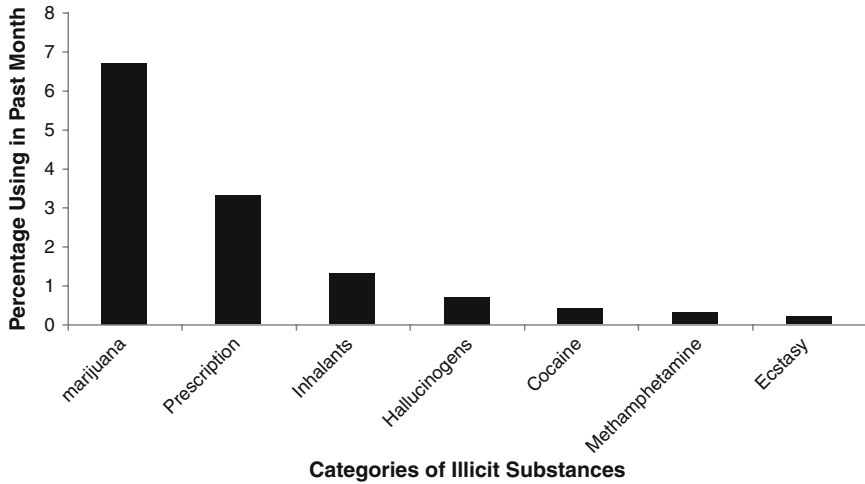


Fig. 6.1 The 2006 National Survey on Drug Use and Health (NSDUH) of illicit substances

hallucinogens and cocaine becoming more popular with age. At the younger age range (12–13 years), between 1% and 2% of preadolescents also used the three most popular substances.

Social-psychological theories of adolescent drug use converge toward recognition that drug use is determined by multiple influences (Joseph, Augustyn, Cabral, & Frank, 2006). Whereas the American Medical Association (1997) Guidelines for Adolescent Preventive Services also recognize multiple influences, there is a particular emphasis placed on peers as an important social risk factor of an adolescent’s own substance use. Social learning theories explain this risk as being one of association with people who both model the behavior and provide opportunities for, and reinforcement of, drug use. In line with these theories, peer-group behaviors pertaining to substance use and in particular those behaviors of close friends are said to predict the practices of adolescents (Joseph et al., 2006).

Hence, adolescent substance users are known to be highly social and to largely engage in the use of substances in the presence of others (Odgers, Houghton, & Douglas, 1996). As cited above, marijuana is the most popular substance of use among adolescents. In Australia, Davey (1990) conducted a longitudinal series of interviews over an 11-month period with a group of high school students to understand the career path and social processes of high school marijuana users. A major finding was that peer interaction is a vital component in determining the degree of involvement in the marijuana culture. Furthermore, it was clearly evident that once students had made their decision to use marijuana, “the peer group became an important factor in continuing such behavior” (Davey, 1990, p. 44). As explained in the Reputation-Enhancing Goals Model (see Chapter 2), the goal of establishing and maintaining a

reputation is to induce a peer audience to attribute certain characteristics to an individual. Individuals deliberately choose to inform an audience about their actions and through this shared knowledge seek to attain an ideal image. On this account, adolescent substance use is motivated as a means of achieving desired reputations. In doing this, users provide their credentials for group membership.

In what appears to be the only application of Reputation-Enhancement Theory to adolescent substance use, Odgers et al. (1996) surveyed 1270 Australian high school adolescents. The findings confirmed that adolescent substance users actively sought a nonconforming reputation that was characterized by high levels of admiration of drug-related activities (e.g., making good money selling drugs), low levels of admiration for prosocial activities (e.g., being a good athlete), and wishing to be mean, nasty, and unreliable, breaking rules, and causing trouble. Furthermore, adolescent substance users communicated with their peers about drug-related activities significantly more than with nonusers, but very little information about drug-related activities was communicated to adults.

## **Alcohol Use and Reputations**

In Western societies, of the substances that begin being used early in adolescence, alcohol is one of the most common. For example, 73% of U.S. and Australian adolescent males and 71% of females report having drunk alcohol (Pirkis, Irwin, Brindis, Patton, & Sawyer, 2003). Moreover, the majority of these adolescents (up to 70%) report their alcohol initiation occurred by age 12 (Adlaf, Ivis, Smart, & Walsh, 1996; Peterson, Hawkins, Abbott, & Catalano, 1994). A common pattern of alcohol use among adolescents is heavy episodic drinking, defined as consuming five or more drinks on a single occasion (Pols & Hawks, 1992). Recent engagement in episodes of binge drinking is reported by 30% to 40% of male and 15% to 30% of female high school students in U.S., Australian, and U.K. studies (see AIHW, 1999; Anderson & Plant, 1996; Bukstein, & Kaminer, 1994). Such drinking is associated with a range of at-risk behaviors and negative consequences including, for example, drinking and driving, unprotected sexual activity and sexual assault, and aggression (de Carvalho et al., 2006; Eaton et al., 2006; Joseph et al., 2006).

According to adolescents, initiation into alcohol use and abuse is attributable to a variety of reasons including the following: thinking drinking will be fun; wishing to be part of the group; wanting to look grown up; liking the taste; to feel relaxed; and because everyone does (Sharp & Lowe, 1989; Wilks, 1992). On the other hand, researchers cite deviant behavior, to rebel against authority, to gain membership to a high-risk group, tolerance for deviance, sensation seeking, to forget problems, and peer use of alcohol as reasons for initiation (Directorate of School Education in Victoria, Australia, 1994; Thombs, Beck,

Mahoney, Bromley, & Bezon, 1994; Webb, Baer, McLaughlin, McKelvey, & Caid, 1991). In a study involving 432 Australian school-aged students (ages 5 years 3 months to 16 years 10 months), Houghton, Carroll, and Odgers (1998) demonstrated that primary and high school students' knowledge about the negative effects of alcohol far outweighed that of the positive effects, particularly from the age of 7–8 years onwards. Furthermore, many children and adolescents associated the positive effects of alcohol with social behavior congruent with attaining a reputation of being popular, cool, and socially admired by others.

It has been found that alcohol is the most prevalent drug of use among adolescents (Eaton et al., 2006; Odgers et al., 1996); the majority of preadolescents to early adolescents develop an awareness of and orientation to alcohol from 7 to 8 years of age; that alcohol is a social mechanism for gaining a cool, nonconforming reputation (Houghton et al., 1998); and that reputation enhancement has been shown to be a major factor in why adolescents use drugs (Odgers et al., 1996). However, although the pursuit of a nonconforming reputation has been demonstrated to be significant in drug use (i.e., nonconformist activity by the standards of the mainstream), many adolescents report that within their alcohol-using group, alcohol use is also viewed as a conforming social activity through which to gain a nonconforming reputation. That is, there is a strong sense of shared identity within the group through drinking, and this reflects a high level of conformity to preferred peer norms (Esmond, 1998).

In a subsequent study to determine the significance of reputation enhancement in young children's and adolescents' orientations toward alcohol use, Houghton, Carroll, Odgers, and Allsop (1998) developed the "Which Group" picture test booklet. This was administered to 640 Australian primary and high school students to gather information about their orientations toward alcohol-risk social situations and reputation enhancement.

The "Which Group" picture test booklet comprises two parts, the first of which uses 10 illustrations of social situations in which alcohol is often present (at home, on the beach, at a party, at a sporting event, and at a barbecue). Each situation depicts four degrees of risk (high = a group of adolescents with large amounts of alcohol; medium = a group of adolescents with alcohol and soft drinks available; low = a group of adolescents with alcohol and soft drinks available under the supervision of one adult; minimal = a group of adolescents with soft drinks available under the supervision of two adults). For each of the five social situations, participants are asked to identify the group of adolescents (i.e., the degree of risk) that *people their age* would most like to be with, and also that *they themselves* would most like to be with. In part two of the "Which Group" booklet, information pertaining to individuals' orientations to alcohol use and reputation enhancement is sought.

Of the sample, 73% of males and 70.6% of females had tried alcohol. Children and adolescents with the greatest orientations toward the high-risk alcohol situation perceived themselves as being significantly more nonconforming than did those in the minimal- and low-risk groups. However, these same

young people ideally wished to be perceived by others as conforming. One possible interpretation of this might be that although youthful alcohol use is interpreted by societal mores as inappropriate and is therefore perceived as nonconforming by adolescents, it may also be interpreted as a conforming activity and as a means of gaining entrance to, and subsequently receiving approval from and acceptance by, the adolescent peer group. Previous research has demonstrated the significance of an audience in enhancing reputations among adolescents (Carroll, 1994; Carroll et al., 2003, 1996; Emler, 1984; Houghton & Carroll, 1996; Odgers et al., 1996), and this may also be true in situations where alcohol is available.

Age-related trends pertaining to reputational orientation and alcohol use in a party situation were also identified in the research. Although there were clearly identifiable trends from ages 8 through to 16, children as young as 5 identified adolescents in high-risk alcohol situations as the biggest trouble-makers, breaking most rules, getting hurt or injured most, and likely to drive when drunk. Furthermore, in contrast with these negative orientations, there was a clear trend of positive orientations by these young children toward the high-risk group as: being most fun to be with, getting on well with most people, trusted with a secret, and as being the healthiest. It appears, therefore, that although children and adolescents are aware of the potential detrimental consequences associated with high-risk alcohol use, it may be that membership of a group involved in such behavior is also socially attractive.

In summary, those children and adolescents with the highest levels of orientation to alcohol, while striving to attain a nonconforming reputation also wish to be ideally perceived as conforming. Individuals with greatest orientations toward high alcohol risk appear therefore to be using their alcohol-related behaviors as a means of achieving their ideal reputations. As Emler (1984) postulated, the goal of reputation enhancement is to induce an audience to attribute an individual with certain characteristics. Individuals choose to inform an audience of their actions and through this shared knowledge hope to attain an ideal image. It appears that social situations where alcohol is used provide an arena of opportunities for young people to publicly indulge themselves in a range of behaviors that not only establish but also maintain their reputations of choice.

## **Use of Volatile Inhalants and Reputations**

Volatile inhalant use (VIU) is the deliberate inhalation of a gas or fumes given off from a substance at room temperature for its intoxicating effect (National Drug Abuse Information Center, 1988). This is another increasingly and widely favored method by which young people pursue the purpose of achieving an altered mental state (Williams, Storck, & the Committee on Substance Abuse and the Committee of Native American Child Health, 2007). Inhalant use is

among the most prevalent, pernicious, and poorly understood forms of adolescent substance use (Brouette & Anton, 2001). William et al. (2007) highlighted the continuing evolution of a variety of methods of inhalant use and the resulting generation of a range of terminologies. Recent terms for practices of use include *huffing* (inhaling through the mouth), *bagging* (paper or plastic bag containing the inhalant is held to the mouth or nose or over the head), *glading* (inhalation of air-freshener aerosols), and *dusting* (abuse of aerosol computer and electronics cleaning products).

According to the 2006 National Survey on Drug Use and Health (NSDUH) conducted by the Substance Abuse and Mental Health Services Administration (2007), VIU was the third most commonly used substance among 12- to 18-year-old individuals. Freedenthal, Vaughn, Jenson, and Howard (2007), found that 9% to 20% of adolescents have engaged in huffing, sniffing, or bagging inhalants such as gasoline, glue, shoe polish, butane gas, and correction fluid. Among children in local residential care, the figure is much higher still, at 33% (Melrose, 2000). Research in the United Kingdom (Harris, 2006) has shown that VIU is the drug of choice among 11- to 13-year-old individuals and is second only to marijuana among 14- to 15-year old individuals. In the United States, Johnston, O'Malley, Bachman, and Schulenberg (2005) and Wu, Pilowsky, and Schlenger (2004) reported that almost one in five 13-year-old individuals admitted inhalant use. Of particular note is that although prevalence is roughly equal between girls and boys (UK Department of Health, 2004), deaths among boys from VIU continues to outnumber that among girls by more than 4:1 (Field-Smith, Butland, Ramsey, & Anderson, 2005).

The worldwide problem of deliberate inhalation of volatile solvents and aerosols was highlighted by the World Health Organization (WHO, 1999) who cited their ready availability, minimal cost, and rapid mood-altering features as particularly attractive to young people. However, inhalants have been shown to cause brain damage, heart problems, liver toxicity, acute renal failure, suicide ideation, and death (Ridenour, 2005; Sakai, Hall, Mikulich-Gilbertson, & Crowley, 2004). Of great concern is the correlation between VIU and suicide risk in young people. For example, an estimated 8.5% of young people in the United States general population reported making a suicide attempt within the 12 months prior to 2004 (Centers for Disease Control and Prevention, 2004). The proportion is far higher among those who use inhalants, however. In addition, 21.9% of inhalant users in Massachusetts high schools reported a suicide attempt (Wilcox & Anthony, 2004). Girls who use inhalants prior to 16 years of age are twice as likely as female nonusers to subsequently attempt suicide (Wilcox & Anthony). Between 1983 and 2003, VIU was a major cause of mortality and morbidity among the adolescent population in the United Kingdom. Of the 1887 known deaths recorded, 50% involved people younger than 18 years of age (Harris, 2006).

It has also been suggested that inhalant use may be an important risk factor for heroin use and injection drug use (IDU) (Wu & Howard, 2007). For example, Storr, Westergaard, and Anthony (2005) reported that the 9% of

youths who initiated inhalant use prior to 14 years of age were twice as likely as inhalant nonusers to use opiates by young adulthood. Johnson, Schutz, Anthony, and Ensminger (1995) reported that youth who used inhalants prior to age 16 were nine times as likely as nonusers to use heroin by age 32. Dinwiddie, Reich, and Cloninger (1991) found that one-third of adult injection drug users had used inhalants. Finally, Wu and Howard (2007) demonstrated that a history of inhalant use, age at onset of inhalant use, and the number of inhalants used are each associated with heroin use and IDU.

Typically, at early high school level, inhalant use often occurs simultaneously with other risk-taking behaviors and tends to escalate among young people who receive poor examination attainments and subsequently drop out of school (Chadwick, Yule, & Anderson, 1990). Thus, it is not surprising that VIU is often associated, among other things, with delinquency, criminal behavior, greater antisocial attitudes, violence, and incarceration (see Williams et al., 2007). Kikuchi and Wada (2003) reported that of 1.4% of 4416 students in Osaka, Japan, who abused solvents, 94% were involved in other types of delinquency.

Among the reasons why adolescents use volatile solvents are the following: having fun with groups of friends; they provide an element of danger and shock, particularly to adults; it is what friends are doing; and it marks users as oppositional to the established order (WHO, 1999). Earlier research by Matsushita, Ueda, Misumi, Kowasaki, and Maeda (1973) also cited frustration and distrust toward parents by males and rebelliousness toward parents by females as reasons for using solvents. Users frequently report that a primary motivation for VIU has been temptation by others (Wada & Fukui, 1994). Kikuchi and Wada (2003) found that peer pressure represented a major factor in 52% of lifetime volatile inhalant users. Suwaki (1983) found that all adolescents attending a hospital child consultation center between 1969 and 1979 initiated VIU on the instigation of others. Furthermore, peer pressure was often cited as a reason for not quitting solvent usage.

It is clear from the research evidence that VIU is mostly confined to young people between the ages of 10 and 16 years, with the peak age being 14–15 years. Onset may occur in children as young as 5 or 6, with use typically declining between 17 and 19 years of age (Williams et al., 2007). It is striking how these data parallel trends in delinquency, particularly the developmental taxonomy proposed by Moffitt, which is characterized by the early-onset life-course persistent delinquent and the adolescent-limited offender. (This will be further explored in Chapter 7.) Throughout this book, we have emphasized the importance of involvement in delinquent and deviant activities as a means of initiating and establishing a chosen social identity, along with affiliation with like-minded peers. Research suggests that this is also the case in the context of VIU, whereby use is engaged usually in peer company.

Prior to our attempts to establish the importance of reputation enhancement to the developmental trajectories of young delinquents, no studies had been conducted that examined the significance of reputation enhancement in VIU.

Our initial research, which involved conducting semistructured interviews with 40 adolescent volatile inhalant users (Carroll et al., 1998), sought to determine whether these young people were purposefully pursuing a particular reputation through deliberately choosing to become involved in VIU. Among the questions they were asked, nine related to sniffing behavior, nine to the social dynamics of VIU, and four to the importance of reputation to group membership. All interviews were audio-recorded, and interrater reliability calculated on the accuracy of interview transcriptions was 94%. The findings clearly showed that use of volatile solvents was group-based and as such provided a social network that served the purposes of companionship, peer network, acceptance, and reputational status.

Young people's perceptions of the function of the VIU group were hierarchical in nature, with the more chronic users accorded greater "in group" reputational status. This is exemplified in the words of one 15-year-old male who referred to the leaders of this group of 40 adolescents as follows: "There are seven main actors in the gang and they sniff all day and night. They are the leaders and can do what they want." Another 13-year-old male referred to group members "not afraid to try things as the cool ones." The individual accorded the greatest reputation among the 40 group members was referred to as "the Queen" because "she's been sniffing the longest" (male, age 15). Furthermore, one of the other reasons for this reputation was because when a national television station produced a news report on VIU, "she stood right in front of them with her glue bag" (male, 15 years). Participants indicated awareness of the short-term health risks involved in the practice: "Ruins your brain cells – a friend of mine died a couple of weeks ago" (male, age 15); "Totally messes up your body, your brain, your heart and lungs. It's not a smart thing to do" (male, age 13). Despite these acknowledgments of serious danger, the consensus among group members was "it's what we all do . . . you know sniff toluene, eat, sleep together, look after each other."

Given these findings, we extended our research by investigating the significance of reputation in VIU according to adolescents' status as current users, past users, or nonusers of volatile solvents (Houghton, Odgers, & Carroll, 1998). One hundred twenty-three high school students (54 males, 69 females) participated. Of these, 31 self-disclosed as current volatile inhalant users, 44 as ex-volatile inhalant users, and 48 as non-volatile inhalant users. The Reputation-Enhancement Scale, which was fully described in Chapter 3, was administered, and participants placed their completed surveys in an envelope that they then sealed to ensure confidentiality. Analyses revealed interesting between-group differences on nonconforming reputation, admiration of drug-related activities, noncommunication of drug-related activities to adults, and ideal private self. Current volatile inhalant users identified themselves as both having and wanting to have a nonconforming reputation significantly more than did non-volatile inhalant users; (this was not the case when compared to ex-volatile inhalant users, however) they admired drug-related activities significantly more than did both ex-volatile inhalant users and non-volatile inhalant users, while

ex-volatile inhalant users also admired drug-related activities significantly more than did non-volatile inhalant users; and they ideally saw themselves as being mean and nasty, wanting to cause trouble, breaking rules, and being unreliable. Interestingly, there were no gender differences for the variables of reputation, which complements prevalence estimates described earlier in this chapter.

From the findings of this study, it appears that differences between current volatile inhalant users, ex-volatile inhalant users, and non-volatile inhalant users can be attributed to factors of reputation enhancement. Current volatile inhalant users appear to engage in a range of activities related to VIU as a means of attaining a nonconforming reputation. These findings add to the earlier findings pertaining to establishing and subsequently maintaining a nonconforming reputation through engagement in substance use (Odgers et al., 1996) and delinquency during the primary and high school years (Carroll et al., 2000, 2003; Carroll, Hattie, et al., 2001; Carroll, Houghton, et al., 1999) and as such further supports the applicability of Reputation-Enhancement Theory to adolescent social-contextual motivations to deviancy at a given point in time. In light of the current findings, it can be seen that factors associated with reputation enhancement are not only important influencing factors among adolescent drug users in general but also among specific groups of users such as volatile inhalant users. More specifically, it has been confirmed in the current research that it is a nonconforming type of reputation that adolescent solvent users are striving to attain and that expressly distinguishes them from ex-users and nonusers.

## **Body Modifications and Reputations**

Body modification in the form of tattoos and piercing is increasingly being incorporated into mainstream youth culture as fashion accessories and adornments, which has led to their wider acceptance and growing popularity, especially among the younger generation (Stirn, 2003). There is a plethora of research evidence, however, that body modification in the form of the presence of a tattoo(s) is correlated with a wide variety of behaviors that put adolescents at risk for psychosocial issues such as delinquency, drug abuse, and sexually transmitted infections (Willmott, 2001), antisocial deviance (Deschesnes, Fines, & Demers, 2006; Putnins, 2002), alcohol consumption (Oliveira, Matos, Martins, & Teles, 2006), peer substance use, marijuana use, fighting, truancy, and school failure (Roberts & Ryan, 2002), personality disorder and accidental death (Roberts & Ryan, 2002; Stirn, Hinz, & Brahler, 2006), and problem behavior and criminality (Carroll, Riffenburgh, Roberts, & Myhre, 2002; Farrington, 1991).

Although approximately 5% to 29% of adolescents aged 12–18 have tattoos (Benjamin et al., 2006; S.T. Carroll et al., 2002; Oliveira et al., 2006), it is particularly pronounced between the ages of 14 and 24 years (38% of females vs. 22% of males; Stirn et al., 2006). By the age of at least 14 years, 10% of



individuals have had a tattoo at some point in their lives; 8% have also had some form of body piercing (Stirn, 2003). Prevalence of body piercing ranges from 13% in the general population to 27.6% in high school students (44% females vs. 11% males; Deschesnes et al., 2006). Similar to tattooing, body piercing has been associated with alcohol and drug use (S.T. Carroll et al., 2002) and involvement in deviant and illegal activities (Deschesnes et al., 2006), nonconformity (Willmott, 2001), health risks (Stirn, 2003), and psychopathological or antisocial behavior (Stirn, 2001),

Despite serious health risks such as infection, viral transmission, and tissue damage associated with such forms of body modification, adolescents are willing to assume such risks (L. Carroll & Anderson, 2002). There are many reasons for this and also for involvement in the more extreme forms of body modification including branding, scarification, cutting, and implanting. These include increasing attractiveness (L. Carroll & Anderson, 2002; Willmott, 2001), the desire for peer acceptance (Houghton et al., 1995; Stirn, 2003), negative feelings toward the body, struggle for identity, self-expression, the desire to project a certain image to others, as an act of self-creation, as a means of carrying visible signs of identity (see Carroll & Anderson, 2002), and to achieve a sense of independence (Holmstrom, 1998).

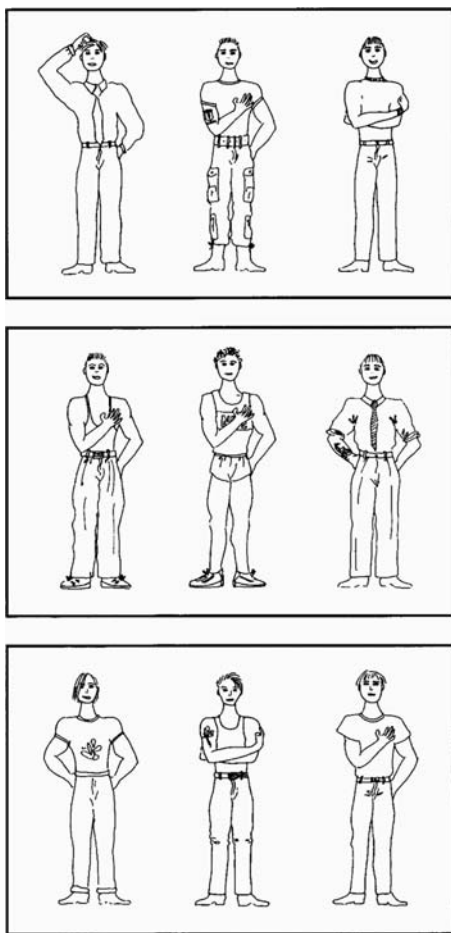
That individual identities develop amid social pressures to both conform and rebel against prevailing norms and that obtaining a permanent marker such as a tattoo or piercing may heighten this development was a point well argued by Irwin (2001) and Velliquette and Murray (2002). What we argue here is that not only is tattooing (and body piercing) in adolescents a useful, easily visible marker that identifies them as at risk of engagement in delinquent behavior (Roberts & Ryan, 2002), but also such body modifications serve the purpose of maintaining a particular social identity both within and outside of the group.

In our exploratory interview-based research with 6- to 17-year-old individuals, there was overwhelming agreement that people with tattoos were seen in a negative light and assigned to the category of undesirable (Houghton, Durkin, & Carroll, 1995). When shown a slide of a tattooed person, almost 90% of the sample ( $N = 80$ ) identified the person as "someone who had been in trouble last night" and was associated with lower status types of employment or illicit activities. Moreover, participants were aware that tattoos changed the perceptions of people toward the person (with the tattoos) and that tattoos portrayed an image of someone who was tough and menacing and involved in drinking and drugs. All participants were also aware of the adverse health issues associated with tattoos. Nevertheless, even given these negativities, some early adolescents professed a more favorable attitude toward tattoos, suggesting that they might create better acceptance among peers. This was particularly the case for females.

Anecdotal and survey evidence from both delinquents (Grumet, 1983; Taylor, 1968) and noncriminal members of the public (Armstrong & Murphy, 1997; Houghton, Durkin, & Turbett, 1995; Stuppy, Armstrong, & Casals-Ariet, 1998) suggest that tattoos often evoke negative appraisals from the authorities or the community in general. For young persons seeking to

establish and subsequently maintain a nonconforming identity, tattoos provide a means to promote a deviant or criminal image. This is not to suggest that all tattooed youths are intent on criminal careers, but most do have to reconcile their markings with their awareness of the negative social stereotypes that they themselves are likely to have held since childhood.

In a study involving 340 children and adolescents (age range 6–16 years), Durkin and Houghton (2000) investigated the extent to which tattooed individuals were associated with antisocial and delinquent attributes and behaviors. A pictorial booklet entitled “Who is it?” that contained a series of illustrations displaying three different men, one of whom was tattooed (on the arm), was developed (see Fig. 6.2). In the illustrations, the men’s hair varied and their



**Fig. 6.2** Example of sets of illustrations used in the booklet “Who is it?”(each page contains one three-man set)

clothes varied so that on any page, the three figures were readily distinguishable, and across the set as a whole there was a wide range of appearance details. Each set of illustrations (as shown in Fig. 6.2) appeared on a separate page, below each of which was a statement declaring that one of the men had committed a positive act, a negative act, or a neutral act. In all, there were 18 acts, six of each, which were followed with the question “Who is it?” Participants simply ticked the box below the figure of whom they believed had committed the act.

Consistent with our earlier exploratory research, the findings affirmed that from a relatively early age and through to mid-adolescence, many young people regard tattooed individuals unfavorably. Hence, it appears that young people attain tattoos either despite or because of this image. Furthermore, those who do become tattooed know that they are likely to be perceived as associated with challenging, tough, or illegal behavior. In other words, some young people may find that tattoos help to cultivate a particular social reputation, which is consistent with Emler and Reicher’s (1995) arguments that delinquent reputations are constructed on the basis of deliberate choices of action and social presentation.

This theory of deliberate choice is reinforced through the desire of some young people to have their tattoos removed in order to change their image. For some young people, removal is a “symbolic” removal of a mark of delinquency – they may wish to see themselves and to be seen by others in a different way. That is, they may wish to adopt a projected image that no longer comprises delinquency, including an outward appearance that might, for some, be stereotypically associated with delinquency (Putnins, 2002).

In sum, among young people there are strong stereotypes of delinquency associated with tattoos. This is important because it forms part of the contemporary sociocultural backdrop within which young people evaluate others and formulate their own intentions and decisions concerning the appeal of permanent body markings. The fact that many adolescents do develop an interest in tattoos, exposing themselves to the very stigma they may once have upheld, highlights a pressing need for research into the peer relations and social-cognitive processes associated with their decisions.

## **Concluding Comments**

This chapter has considered a range of significant risk-taking behaviors in which many young persons indulge for the purposes of developing and maintaining a specific social identity. As youth approach early adulthood, decisions have to be made about the ways in which they wish to present themselves to others and also the costs of doing so according to the reactions they get from others (Koch et al., 2005). Moreover, young people may have to weigh up the choice between peer acceptance and rejection by parents and other authority

figures. For many kids, peer acceptance and parental acceptance are comfortably aligned, whereas for others parental rejection precedes and promotes involvement with deviant peers. Emler and Reicher (1995) emphasize that “reputation is created out of the pattern of direct and indirect evidence accumulated within the social environment over time” (p. 112). In examining how reputation may be maintained, this chapter has addressed issues raised by Emler and Reicher (1995) that they regard as the “great problems for all actors on the stage of everyday life” (p. 113). That is, without constant attention, reputations can decay. What we have demonstrated in this chapter is that involvement in substance use, using volatile inhalants, or modifying physical appearance through tattooing or piercing gives adolescents access to the stage of everyday life, a communal environment in which all of human life can, in principle, participate. It can be argued that the phenomena with which we have been concerned in this chapter concern “off-stage” behaviors, which are conferred with meanings and values by those who do not, or cannot, join the mainstream.

## Chapter 7

# Early-Onset Life-Course Persistent and Late-Onset Adolescent-Limited Offenders: Impulsivity, Peers, and Social Reputations

In the initial chapter of our book, we delineated the theories of delinquency and drew particular attention to the developmental trajectories proposed within Moffitt's developmental taxonomic theory of delinquency (Caspi & Moffitt, 1995; Moffitt, 1990, 1993, 1994, 1997, 2003). Two primary prototypes were initially hypothesized by Moffitt:

1. Early-onset life-course persistent (LCP) offenders who are few, persistent, and pathologic and whose antisocial behaviors originate in neurodevelopmental processes, beginning in childhood, and continuing to worsen thereafter.
2. Late-onset adolescent-limited (AL) offenders who are common, near normative, and whose involvement in offending behavior is relatively transient.

Researchers identified two further types from the original taxonomy, the third of which (originally labeled as "recoveries" by Moffitt et al., 1996) was labeled "low level chronics." These were persistent offenders from childhood to adolescence (Fergusson et al., 2000) or from adolescence to adulthood (Najin, Farrington, & Moffitt, 1995) but at a low rate. The fourth group, labeled the "abstainers," managed to avoid virtually all antisocial behavior during childhood and adolescence (Moffitt et al., 1996).

The focus of this chapter is on the original two prototypes (LCP and AL offenders) who are said to account for the majority of the population's antisocial behavior (Moffitt et al., 2002). Specifically, this chapter examines individual difference variables of impulsivity and sociability that may serve to distinguish particular groups of young people who engage in delinquent activities. We first examine aspects of impulsivity that Moffitt (1993) proposed differentiated between LCP and AL offenders and served to maintain their antisocial behavior throughout life. We also extend the empirical evidence presented in previous chapters that has demonstrated the importance of reputation to adolescent offenders who achieve their social identity of choice through the highly visible nature of their offending behavior carried out in the presence of an audience. To date, this has been the basis of our understanding of traditional Reputation-Enhancement Theory. In this chapter, we explore

aspects of this theory further by presenting evidence pertaining to a core group of individuals who commit acts of delinquency but *not* in the company of others, which appears to be in contrast with the “need for a peer audience” as proposed in traditional Reputation-Enhancement Theory.

Finally, in this chapter we examine another group of individuals who are further differentiated by the presence of callousness and other affective and interpersonal traits that make up psychopathic-like tendencies. Moffitt, Caspi, Harrington, and Milne (2002) reported that compared with AL males, LCP males had a more psychopathic personality profile (present since 18 years of age). In Chapter 8, we examine the psychopathic-like tendencies of this group of individuals, but prior to 18 years of age.

### **Early-Onset Life-Course Persistent Offenders and Late-Onset Adolescent-Limited Offenders: Differential Patterns of Delinquency and Impulsivity**

Patterns of offending differ between early-onset LCP and late-onset AL offenders (Moffitt, 1990; Moffitt & Caspi, 2001; Moffitt, Caspi, Rutter, & Silva, 2001; Moffitt, Lynam, & Silva, 1994). LCP offenders ( $N = 5\%$ ) account for 50% to 60% of all crimes committed (Henry et al., 1996). The remaining 95% of offenders appear to begin their criminal careers later, and their offending behavior tends to be less frequent and less violent than that of the LCP offenders.

The timing of onset and durability of involvement in offending behaviors differentiate these groups, by definition. What other factors distinguish them? One important factor is that the two offender types have different orientations toward peers. AL offenders, compared with LCP offenders, associate more strongly with and are not rejected by peers (Moffitt & Caspi, 2001). LCP delinquents engage in problem behavior largely irrespective of peer reference; if peers become salient, it is because circumstances and opportunities lead high-risk youths into the company of like-minded others. In contrast, AL offenders tend to be drawn into delinquent activity primarily because their peers are already doing it and because their peers encourage, evaluate, and reward their participation (Moffitt, 2006).

For some time, researchers have suggested that delinquent behavior is a result of deficits in impulse control (Barratt & Patton, 1983; Eysenck & Eysenck, 1977; Robbins & Bryan, 2004; Romero, Luengo, & Sobral, 2001; White et al., 1994). Impulsivity is seen as a specific construct of self-regulation covering a broad range of behaviors (Baumeister & Vohs, 2004; Eysenck & McGurk, 1980). According to Moffitt (1993), the criminal behavior of LCP offenders may be due to deficits in neuropsychological functioning, including self-control (especially impulse control) that may serve to maintain antisocial behavior throughout life. There is extensive evidence that impulsivity, or the inability to regulate self-control, is an important determinant of delinquent

behavior (Farrington et al., 1990; Gottfredson & Hirschi, 1990; Kindlon, Mezzacappa, & Earls, 1995; Vitacco & Rogers, 2001; White et al., 1994). For example, Vitacco, Neumann, Robertson, and Durrant (2002) found that detained male adolescents scored high on impulsivity, and this predicted greater antisocial behavior 18 months later at follow-up. Dãderman (1999) also found delinquents scored significantly higher than did nondelinquents on impulsivity, and White et al. (1994) found impulsivity correlated significantly with delinquency at 10, 12, and 13 years of age.

Specific dimensions of impulsivity have also been examined because of their reported association with delinquent behaviors. These include the inability to exercise inhibitory control (Barkley, 1997; Moffitt, 1990); tendency to respond quickly without thinking, due to differences in cognitive tempo (Barratt & Patton, 1983; Lawrence & Stanford, 1999); inability to maintain an appropriate set of social problem-solving skills (Biggam & Power, 1999; Greening, 1997); and willingness to trade accuracy for speed when processing information (Dickman & Meyer, 1988). The research clearly shows that young offenders tend to take significantly more risks than do nonoffenders (Arnett, 1992; Luengo, Carrillo-de-la-Pena, Otero, & Romero, 1994), and high-impulsive adolescents and young adults are more frequently involved in risk-taking behavior than are low-impulsive individuals (Stanford, Greve, Boudreaux, & Mathias, 1996; Vitacco et al., 2002).

There is considerable evidence, then, pointing to impulsivity as a characteristic of juvenile offenders, and linking impulsivity to risk-taking behaviors. There is also evidence that problems with impulsivity are detectable early in the lives of individuals who subsequently become LCP offenders. Nevertheless, much of the research to date has focused on comparisons between offenders and nonoffenders, and little is known about differential patterns of early-onset versus late-onset offenders. To address this, we examined the information processing and personality characteristics of early-onset, late-onset, and non-offending youths on a range of measures pertaining to impulsivity (for a full description, see Carroll et al., 2006).

### **Impulsivity and Juvenile Delinquency in Early-Onset and Late-Onset Offenders and Nonoffenders**

Participants were 129 Australian adolescents in three equal-sized ( $n = 43$ ) groups of early-onset offenders, late-onset offenders, and nonoffenders drawn from one youth detention center and 10 state high schools in the capital city of Queensland, Australia. The groups were matched on age, gender, and Aboriginality. Participants who had committed an offense prior to 12 years of age or had been in detention prior to that age were assigned to the LCP group. Those whose offending commenced at 13 years of age or later were assigned to the AL group, and all participants with no history of offending became the

nonoffender group. Information pertaining to offense history of participants was verified through checking official criminal records.

Six measures were administered to participants as follows.

- The *Adapted Self-Report Delinquency Scale* (ASRDS; Carroll et al., 1996) comprising 44 items covering a wide range of frequently occurring delinquent acts in Australia with wording consistent with adolescent usage. (This was described in detail in Chapter 3.)
- The *Stroop Color and Word Test* (see Golden, 1978), a test of response inhibition or selective attention, which consists of three pencil and paper parts. All Stroop scores are calculated by summing the number of correct responses and then the raw score is converted into normative data via t-scores ( $M = 50$ ,  $SD = 10$ ) for ease of comparing scores across participants, where t-scores above 65 and below 35 indicate high levels of interference and t-scores between 65 and 35 indicate low levels of interference.
- *Time Perception* (White et al., 1994), operationalized by using time estimation and production tasks. The current study created a distinct measure of time perception computed separately for estimation and production tasks. For estimation scores, the error in seconds for each second estimated was found for each participant (original time estimated and subtracting the actual time interval, e.g., 5 seconds estimated – 2-second interval = 3-second error). Similarly, for production scores, the error in seconds for each second estimated was found for each participant, where the signal stop time in seconds was subtracted from the actual time interval in seconds, (e.g., time signaled to stop at 3 seconds – 2-second interval = 1-second error). In the current study, high error scores for the estimation task and low error scores on the transformed production task represent a rapid cognitive tempo.
- The *Accuracy Game (Adapted)* (Rosvold, Mirsky, Sarason, Bransome, & Beck, 1956), an interactive measure of the speed–accuracy trade-off that is expected to differentiate reliably between individuals with a predisposition toward speed or accuracy in information processing. The original development of the continuous-performance test (Rosvold et al., 1956) consisted of responses to the presentation of the letter “X” or “XA” recorded by the press of a button. For this Accuracy Game task, the continuous-performance test was adapted to consist of a series of trials in which participants were presented with 50 red hexagons over a period of 2 minutes on a computer screen. The participant is required to click on the hexagons (which are presented at a progressively faster rate) using the computer mouse. The number of correct presses out of 50 measures accuracy, with those that score highly (e.g., more than 25) indicating a preference for accuracy over speed.
- The *Risk-Taking Game (Adapted)* (Newman, Kosson, & Patterson, 1993), a computer game adapted by Carroll (2001) designed to assess risk-taking behavior via a simulated gambling task. The task consists of participants identifying the amount of money they wish to risk, starting with a balance of \$100.



The participant then chooses a black or red card by clicking on it with the mouse, then clicking on “Deal a Card,” where the win or loss is displayed on the balance. The game is over when the money is spent or after 10 trials. The dependent measure is the absolute weighted average of bets over the 10 trials, where high risk-taking is represented by values over 0.50 and low risk-taking is represented by values below 0.50.

- *The Eysenck Impulsiveness Questionnaire (Adapted)* (Eysenck & Eysenck, 1978) is a self-report questionnaire of impulsive behavior consisting of 23 items (e.g., “Do you get bored more easily than most people, doing the same old things?”). For the current study, the 23-item questionnaire was reduced to 13 items to consist of items that reported the highest factor loadings on impulsivity (Eysenck & Eysenck, 1978). Questions are scored on a Likert-type scale where 1 = Never and 4 = Always, with higher scores indicating higher impulsivity.

Our findings for *delinquency* (as measured by the Adapted Self-Report Delinquency Scale) revealed that there was a significant multivariate main effect,  $F(14, 238) = 21.51, p < .001, \eta^2 = .56$ , with significant differences for all seven delinquency variables, namely stealing offenses,  $F(2, 128) = 88.70, p < .001, \eta^2 = .59$ ; school misdemeanors,  $F(2, 128) = 7.79, p < .01, \eta^2 = .11$ ; soft drug use,  $F(2, 128) = 151.46, p < .001, \eta^2 = .71$ ; vehicle-related offenses,  $F(2, 128) = 60.89, p < .001, \eta^2 = .49$ ; abuse of property,  $F(2, 128) = 15.82, p < .001, \eta^2 = .20$ ; physical aggression,  $F(2, 128) = 46.55, p < .001, \eta^2 = .43$ ; and hard drug use,  $F(2, 128) = 28.75, p < .001, \eta^2 = .32$ . LCP offenders reported significantly higher involvement than did AL offenders on five of the seven delinquency variables (the exceptions being abuse of property and soft drug use). LCP and AL offenders reported significantly higher involvement than did nonoffenders in six of the seven delinquency variables. For school misdemeanors, there were no statistically significant differences between AL offenders and nonoffenders. These differential patterns of offending behavior according to age of onset (Fig. 7.1), show LCP offenders reporting the highest levels of involvement, which confirms Moffitt’s (2006) hypothesis that life-course persistent development is differentially associated with more serious and aggressive types of offending.

*Impulsivity* as measured by the Stroop Color and Word Test revealed a significant difference  $F(6, 238) = 5.74, p < .001, \eta^2 = .13$ . On both the word and color naming tasks, a significant difference was evident between nonoffenders and the two offender groups, in that early-onset and late-onset offenders had significantly greater difficulty with the word-naming and color-naming tasks (Fig. 7.2). No differences were found, however, between early-onset and late-onset offenders.

For *personality variables of impulsivity*, participants’ performance on the Eysenck Impulsiveness Questionnaire differed across the three groups,  $F(2, 122) = 15.17, p < .001, \eta^2 = .20$ , with both offender groups being significantly more impulsive than were nonoffenders. However, there was no

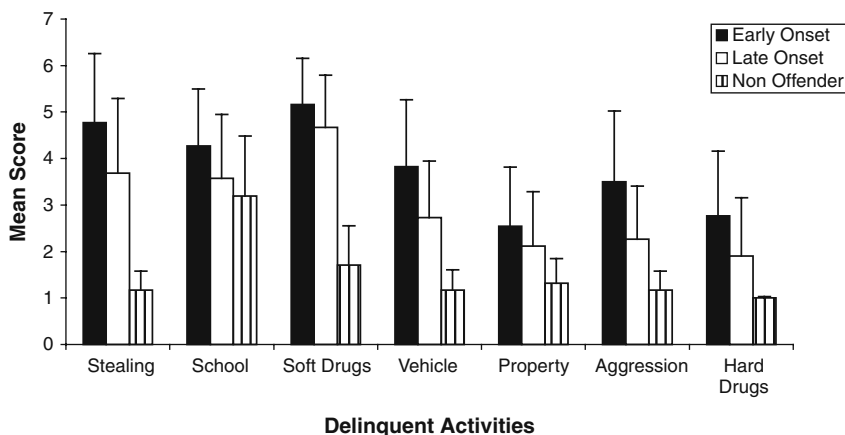


Fig. 7.1 Mean delinquency scores as a function of history of offending

significant difference in impulsivity between early-onset and late-onset offenders (Fig. 7.3).

With respect to *time estimation*, there was a statistically significant difference among the three groups,  $F(2, 123) = 3.51, p < .05, \eta^2 = .05$ , with early-onset and late-onset offenders being markedly more likely to overestimate the amount of time that had passed than were nonoffenders. There was no difference, however, between early-onset and late-onset offenders in their estimation scores. Similarly, for *time production*, early-onset and late-onset offenders were significantly more likely to overestimate the amount of time that had passed than were nonoffenders, but again there were no significant differences between early-onset and late-onset offenders. Participants' mean scores are shown in

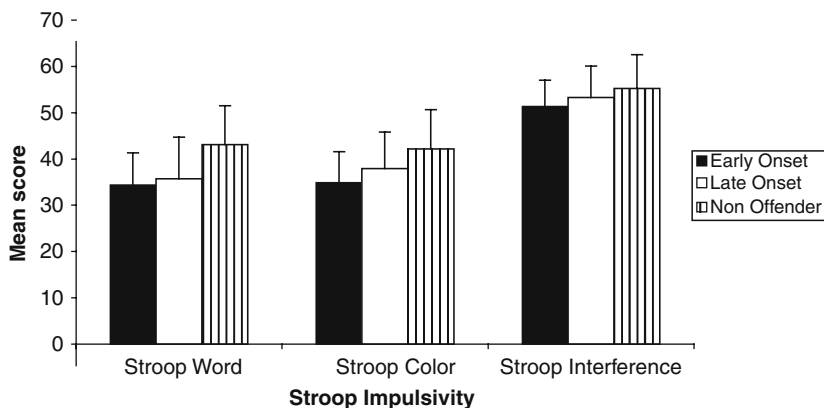


Fig. 7.2 Mean impulsivity scores as a function of history of offending

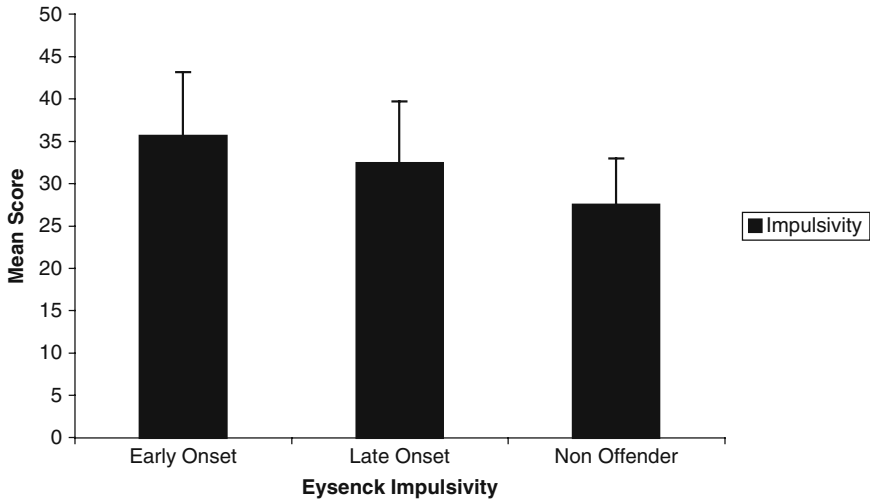


Fig. 7.3 Eysenck impulsivity score as a function of history of offending

Fig. 7.4. For the *accuracy* and *risk-taking behavior* tasks, there were no significant differences among the three groups.

As we highlighted earlier in the chapter, impulsivity has been found to be associated with delinquent behavior (Dåderman, 1999; Romero et al., 2001; White et al., 1994), and the results of the current study are no exception. Together, the Stroop, time perception, and Eysenck impulsiveness measures

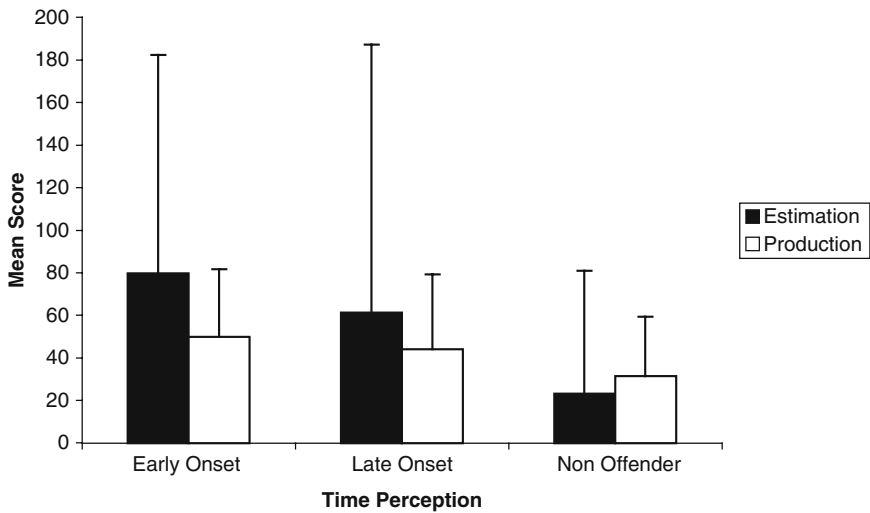


Fig. 7.4 Time perception as a function of history of offending

show that offending youths are very different from nonoffending youths in this respect. However, the findings do not suggest that late-onset offenders differ reliably from early-onset offenders. It could be that impulsivity places an individual at risk of involvement in antisocial behaviors and that some (early-onset) individuals may, in certain circumstances, manifest problems from an early stage. Other individuals may be developing in contexts that do not place them at such risk, or perhaps act as a buffer, but on reaching adolescence may elect for new contexts (e.g., new peers, pursuit of more “adult” activities); in these more risky environments, their impulsivity may be less constrained and this may lead them toward late-onset offending. Given the elements of social mimicry as suggested in Moffitt’s (1993) account of late-onset delinquency, it is also possible that such individuals adopt characteristics, such as impulsivity, that are highly salient in riskier peers. The current cross-sectional study does not allow us to test these possibilities directly, but the findings do indicate that once antisocial careers are under way, the two groups demonstrate only modest differences on measures of impulsivity.

In a speed–accuracy task, there were no significant differences in preferences for accuracy in our sample of juvenile early-onset offenders, late-onset offenders, and nonoffenders. Previous research has suggested that impulsive behavior is categorized by rapid, inaccurate performances on various tasks, although results have been mixed (Dickman & Meyer, 1988). Consequently, the current finding may be due to a lack of sensitivity in the speed–accuracy task, such that the situational pressure to be very fast or to be very accurate was not apparent.

No significant differences were evident between the three offender groups on risk-taking behavior, as measured in a gambling task. Risk-taking behavior in adolescence has been described as reflecting a need for diverse and novel sensations and activities, together with a willingness to expose oneself to the possibilities of physical or social harm in the course of such experiences (Arnett, 1992; Zuckerman, 1994). For obvious ethical reasons, we could not test our participants’ readiness to take risks involving authentic self-harm, physical or social. A gambling task addresses one dimension of risk taking, but it appears not to capture differences among the three groups tested here.

In summary, although our research has confirmed and extended previous research by indicating that adolescent offender and nonoffender groups are reliably differentiated with respect to impulsivity, it has not been able to confirm that there are statistically significant differences between early-onset versus late-onset offenders. A possible (and the most parsimonious) interpretation is that all young people who get drawn into delinquency, whether early-onset or late-onset, are more impulsive than the norm. Alternatively, we may have lacked statistical power. Nevertheless, this raises intriguing questions, particularly concerning the developmental history of problems with impulsivity in late-offending youths. Are these individuals with long-term impulsivity characteristics who have offended previously but not been caught? Or have they acquired problems with impulse control as a consequence of their more general

involvement in delinquent activities, perhaps through processes of social mimicry in the context of peer relations with early-onset offenders who may suffer impulse problems for different (e.g., biologically determined) reasons?

## **Extending Reputation-Enhancement Theory: The Social Reputations of Loners**

The empirical work addressing the relationship between impulsivity, peers, and delinquency is substantial (e.g., Farrington et al., 1990; Gottfredson & Hirschi, 1990; Haynie, 2001; Kindlon et al., 1995; Matsueda & Anderson, 1998; Thornberry, Lizotte, Krohn, Farnworth, & Jang, 1994; Vitacco et al., 2002; Vitacco & Rogers, 2001; Warr, 2002; White et al., 1994). As we highlighted earlier in this chapter, the AL offender associates more strongly with delinquent peers compared with the LCP offender. It may be that for these AL delinquents, Reputation-Enhancement Theory, which demonstrates that peers are the driving force, provides opportunities by which late-onset offenders sculpture their social reputations of choice.

But is this truly the case? In an examination of this proposition, it was found that some young offenders do not necessarily need a peer audience through which to communicate their reputation. Houghton, Cordin, and Hopkins (2007) conducted interviews with 42 individuals (28 detention center officers, four high school teachers, five primary school teachers, and five psychologists resident in centers for children with conduct problems) and found that some young people involved in delinquent activities reported no need to be affiliated to a delinquent peer group in order to “have a reputation.” Rather, contrary to Reputation-Enhancement Theory, these young people committed their delinquent acts without the immediate presence of an audience, yet still achieved status and a social reputation among their adolescent peers. According to the participants in the interviews, a defining characteristic of these individuals is that they have few, if any, friends. It is our belief that these young people indulge in acts of delinquency similar to the AL offender, but with the express purpose of attaining a different type of reputation that further differentiates them from the AL offender.

Extensive research into adolescent delinquency has demonstrated that having delinquent friends is an important predictor of an individual’s delinquency (Kerpelman & Smith-Adcock, 2005). Little research, however, exists that has specifically explored the delinquent activities of adolescent *loners*. Loners experience significantly greater feelings of isolation from others, become marginalized from peer networks, are rejected by others, drift in and out of unstable relationships, and are at greater risk for subsequent adversity (Demuth, 2004). Moreover, for those who become isolated early in primary school, mental health problems and dropping out are highly prevalent in the high school context (Tolone & Tieman, 1990).

There appears to be mutually consistent evidence, therefore. Demuth (2004) reported that the 6.5% of high school 13- to 17-year-old individuals who were identified as loners engaged in significantly more serious public disorder and status offenses than did nonloners. Data from the National Longitudinal Study of Adolescent Health (Kreager, 2004) revealed that on the whole, “isolates” were not necessarily more likely to engage in delinquent activities. However, isolates who reported having significant trouble with others (“peer-trouble isolates”) became more involved in delinquent activities and formed delinquent peer associations compared with isolates who reported having little trouble with others (“invisible isolates”). How Reputation-Enhancement Theory applies to loners has yet to be examined. To address this, we examined the self-reported delinquency and reputational orientations of loners and nonloners.

### **Study: The Delinquency and Reputational Orientations of Loner and Nonloner Delinquents**

Using the sociability subscale of the Reputation-Enhancement Scale, a subset of 98 participants identified as loners (62 male and 36 female, 13–17 years) from a larger sample of 1460 adolescents were pair-wise matched on age (within 5 months) and gender with nonloners (Houghton et al., 2008). Participants were allocated to the loner group (regardless of delinquency status) if their mean score on the sociability scale was 3 or less. Participants were allocated to the nonloner group if their mean score on the sociability scale was from 4 to 6. Mean age of the loner sample was 15.1 years ( $SD = 1.40$ ) and of the nonloner sample was 15.1 years ( $SD = 1.41$ ). Participants were recruited from 10 state high schools and three detention centers in the capital cities of Queensland and Western Australia. Two scales that were fully described in Chapter 3 were administered to all participants: the Adapted Self-Reported Delinquency Scale (Carroll et al., 1996) and the Reputation-Enhancement Scale (Carroll, Houghton, et al., 1999).

For *delinquency*, there was a main effect for loner status [ $F(7, 170) = 2.08, p < .05, \text{partial } \eta^2 = .08$ ], with significant differences for three of the seven delinquency variables, namely physical aggression [ $F(1, 176) = 8.11, p < .004, \text{partial } \eta^2 = .04$ ], stealing offenses [ $F(1, 176) = 7.56, p < .006, \text{partial } \eta^2 = .04$ ], and vehicle-related offenses [ $F(1, 176) = 7.83, p < .005, \text{partial } \eta^2 = .04$ ]. Mean scores, shown in Fig. 7.5, revealed that loners reported higher involvement than did their matched nonloners on these.

For *reputation enhancement*, there was also a significant main effect for loner status [ $F(16, 161) = 3.60, p < .001, \text{partial } \eta^2 = .26$ ]. Four of the 16 reputation variables revealed differences between loners and nonloners: self-perceived social conformity norms [ $F(1, 176) = 23.62, p < .001, \text{partial } \eta^2 = .12$ ], evaluative reactions to others social conformity [ $F(1, 176) = 10.20, p < .003, \text{partial } \eta^2 = .06$ ], conforming self-perception [ $F(1, 176) = 31.96, p < .001,$

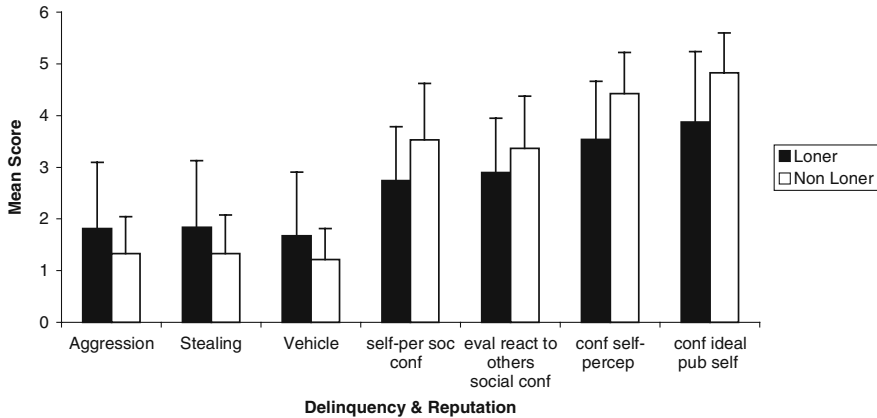


Fig. 7.5 Delinquency and reputational orientations as a function of loner or nonloner status

partial  $\eta^2 = .15$ ], and conforming ideal public self [ $F(1, 176) = 26.06, p < .001$ , partial  $\eta^2 = .13$ ]. Mean scores shown in Fig. 7.5 indicate that loners reported lower scores than did nonloners on these four reputation-enhancement variables.

The loners in our study engaged in victim-oriented offenses and more violent-type activities. As shown by our data, the offenses committed by loners are committed at a higher level than that of nonloners, and also the reputation they are seeking is different than that sought by nonloners. Whereas there were similarities on 12 of the reputation variables, significant differences existed between loners and nonloners on four others. Specifically, loners reported having significantly lower levels of admiration for young persons who were socially conforming and also believed that peers of their age would not admire these socially conforming individuals. Furthermore, loners reported that peers perceived them as not getting along well with others, as not being trustworthy, and as not having a good reputation. This was in line with the reputation that loners wished to cultivate among their peers (i.e., being untrustworthy, not popular, not getting along with others).

We have proposed throughout this book thus far that the desire to attain a specific social identity is important to adolescents, particularly those who are striving for nonconformity. We argue now that even in the absence of an audience, adolescent loners still strive to attain a social identity, but one that is different than those adolescents who offend in the company of others.

Our examination of 98 matched pairs revealed that in common with nonloners, delinquent loners reported significantly less admiration for socially conforming activities (e.g., obeying parents, receiving good grades). Furthermore, they were less likely to perceive that their peers admired those who sought conforming reputations and were less inclined to think that their peers would perceive them as socially conforming. Moreover, they did not wish to be

perceived by others as having a conforming reputation. In comparison with our research reported earlier in this book demonstrating that delinquents clearly express a desire to establish, enhance, and maintain a deviant and nonconforming reputation, loners appear to be less concerned about how others perceive them and also about how they perceive others. That these individuals scored significantly lower than did nonloners on the reputational factors pertaining to delinquent activities and socially conforming behaviors that attract peer admiration suggests that whereas they do not want to be perceived as having a conforming reputation, simultaneously they do not actively seek to attain an outright public nonconforming delinquent reputation. Indeed, loners wish to be nonconforming but desire this to be of a private nature, which may be why they commit delinquent activities without the presence of an audience

### **Psychopathic-like Tendencies and Young Persons at Risk**

There is, according to quite extensive research, a further group of young people with psychopathy, whose involvement in delinquency is not by choice. According to Salekin (2006), it is unclear how the phenomenon of psychopathy can be accommodated within Moffitt's dual subtype scheme. Whereas it has been suggested that the LCP offender category may capture young persons with psychopathic-like traits, there is evidence showing that these individuals do not fit neatly into this offender subgroup (Salekin, 2006). According to research findings (Vincent, Vitacco, Grisso, & Corrado, 2003) from a cluster analysis of the distinctive facets of the construct of psychopathy (i.e., affective, interpersonal, and behavioral), there may be more than the two distinctive juvenile offender subtypes.

Individuals with psychopathic-like traits are impulsive and tend to engage in risky, socially deviant behaviors. Research has shown that it is the presence of a callous/unemotional (C/U) interpersonal style that may be an important marker along with the dual presence of hyperactivity/impulsivity and inattention (HIA) and conduct problems (CP). Specifically, it is this combination (HIA plus CP) that, according to Lynam (1996, 1998), constitutes a unique subgroup of "fledgling psychopaths" who possess a "virulent strain" of CP. According to Lynam (1996), "tomorrow's antisocial adults can be found among today's antisocial children, given that conduct problems in childhood are a major risk factor for disorders in adulthood involving aggressive antisocial behavior" (p. 210).

For these individuals, social identity appears to go before them rather than them having to seek and establish a reputation through their involvement in delinquent activities. Thus, it is not that reputation is not important to these young people, rather it is through a devastating developmental disorder defined by a constellation of affective, interpersonal, and behavioral characteristics that predetermines their early and persistent involvement in delinquent activities. In Chapter 8, we briefly review the research pertaining to these young persons and then present a test of the *Fledgling Psychopath Hypothesis*.



## Concluding Comments

In this chapter, we have examined two areas of individual differences that bear on the behaviors of delinquents. First, as in earlier studies, we found that offending youths scored higher on measures of impulsivity than did nonoffending youths. Delinquent youths are more likely to have difficulties in inhibiting prepotent responses, self-regulating their behavior, and managing time. Contrary to expectations, we did not find that late-onset offenders differed reliably from early-onset offenders in these respects.

Second, we have also provided evidence that young people who are loners (low in sociability) differ from age-matched peers who score higher on a measure of sociability. Loners reveal higher involvement in physical aggression, stealing, and vehicle-related offenses. Loners seem less motivated by social conformity norms, evaluative reactions to others' social conformity, conforming self-perception, and conforming ideal public self. Interestingly, these individuals also scored significantly lower than did nonloners on the reputational factors pertaining to delinquent activities. Having an audience appears to be less important to this group of young people. For loners, the immediate group context does not appear to apply, nor do factors such as whether or not friends also engage in delinquent activities; visibility of these activities also appears irrelevant because they (loners) have few, if any friends.

Whereas most AL adolescents express a desire to establish, enhance, and maintain a deviant and nonconforming reputation, loners appear less concerned about how others perceive them. Though not actively seeking an outright public nonconforming delinquent reputation, loners wish to be seen as nonconforming but not within the context of a peer group, which as we reiterated earlier may be why delinquent activities are committed without the presence of an audience. The implications of these findings will be discussed in the final chapter of our book.

## Chapter 8

# Psychopathy in Children and Adolescents and the Fledgling Psychopath Hypothesis

In Chapter 7 and in Chapter 4, we mentioned a group of young persons at risk of adverse outcomes who show severe antisocial behavior and characteristics that are similar to those of psychopathic adults. These individuals appear to be heading toward gaining reputations as delinquent although their professed interest in reputation enhancement may actually be lower than average. Nonetheless, the reputation that these young people are at risk of developing is one that conjures a specific image of a person who manipulates others for his or her own benefit. This is contrary to the typical young person at risk who has developed peer networks through which a reputation is established and maintained and may also be different than the social isolate (loner) who conducts his or her deviant activities in private in order to attain a specific social identity. For individuals with psychopathic-like traits, it is the combination of a deviant lifestyle and a psychopathology that predisposes them to risk and, consequently, in many cases, adverse outcomes. In the current chapter, we briefly examine the distinguishing characteristics of young persons who have been termed *fledgling psychopaths* and then we present an empirical test of the *Fledgling Psychopath Hypothesis*.

### Child and Adolescent Psychopathy: A Brief Overview

Hervey Cleckley (1903–1984) in his classic work *The Mask of Sanity* (Cleckley, 1941) initially described *adult* psychopaths as a difficult-to-treat group of antisocial individuals with a personality disorder who were likely to commit more types of crimes than were other offenders. Cleckley formulated 16 distinguishing characteristics that could be grouped into three distinctive categories: (a) an arrogant and deceitful interpersonal style involving manipulation, dishonesty, grandiosity, and glibness; (b) a defective emotional experience, involving shallow emotions and a pronounced lack of remorse, empathy, and lack of personal responsibility for one's own actions; and (c) impulsivity, irresponsibility, and sensation-seeking behavior (Cleckley, 1976; Cooke &

Michie, 2001; Hare, 1991; McCord & McCord, 1964; Millon, 1981). There is clear evidence from longitudinal and cross-sectional studies that adult psychopathy can often be traced back to childhood (Forth & Burke, 1998; Lahey, Loeber, Quay, Frick, & Grimm, 1992; Saltaris, 2002).

Research (Caspi, 2000; Frick, Bodin, & Barry, 2000) has demonstrated the existence of a subgroup of conduct-disordered children who resemble adult psychopaths in temperamental attributes (from which personality develops). Although it is clearly evident that a proportion of delinquents manifest problems earlier in childhood, not all become psychopaths. A major shortcoming of research with young persons in this field has, however, been the lack of longitudinal studies to investigate the stability of psychopathic-like traits over time. Of the longitudinal research conducted, one of the best predictors of which children with severe antisocial behavior are most likely to exhibit antisocial behavior in adulthood is the onset of severe conduct problems prior to adolescence (see Silverthorn & Frick, 1999). Most evidence to date tends to come from analyses of retrospective study data from adults, and this clearly demonstrates the chronic nature of psychopathy. For example, the earliest study was by Robins (1966, 1978), which reported that more than 50% of young persons with sociopathic, delinquent, and conduct problems continued to have antisocial lifestyles 20 years later.

There does exist considerable developmental research that not only suggests that psychopathy may emerge at an early age but also that it may arise from a combination of behavioral problems (see Salekin, 2006). Farrington, Loeber, and Van Krammen (1990) demonstrated through their longitudinal research that children with hyperactivity/impulsivity and inattention (HIA) coupled with conduct problems (CP) are more likely to have higher rates of delinquency in adolescence and to continue their offending into adulthood compared with their HIA-only and CP-only counterparts. Lynam (1996) proposed that the combination of Attention-Deficit/Hyperactivity Disorder (ADHD) and CP in early childhood develops into oppositional and defiant behaviors as the child acquires verbal and motor skills. By adolescence and adulthood, this can result in the manipulative and callous behaviors so characteristic of psychopathic adults (see also Brinkley, Newman, Widiger, & Lynam, 2004). Lynam (1996) argued that children with this combination are “at specific risk for later psychopathy and are beset with a particularly virulent strain of conduct disorder best described as fledgling psychopathy” (p. 567).

Barry et al. (2000) have also shown the presence of callous and unemotional (C/U) traits as designating this group of young persons with psychopathic-like traits. The importance of C/U traits in developmental pathways to severe antisocial behavior in children was demonstrated by Frick et al. (2003). Their findings revealed that the presence of C/U traits in nonreferred children may designate a distinct, behaviorally dysregulated group of children with CP who may have unique processes underlying their dysregulation that make them more similar to adults with psychopathy.

Young people with these traits reportedly commit a disproportionate amount of crime, appear unperturbed when confronted with the destructive nature of their behavior (Blair, Colledge, Murray, & Mitchell, 2001), and are more likely to re-offend (Forth & Burke, 1998) or resist efforts at rehabilitation (Salekin, Rogers, Ustad, & Sewell, 1998). Adult outcomes include a severe and aggressive pattern of behavior (Christian, Frick, Hill, Tyler, & Frazer, 1997), which is related to violent offenses (see Campbell, Porter, & Santor, 2004), serious levels of institutional aggression (Edens, Poythress, & Lilienfeld, 1999), and violent recidivism (Gretton, McBride, Hare, O'Shaughnessy, & Kumka 2001). Thus, young persons who present with these characteristics are at risk of adversity across the life span.

Children and adolescents who display the hallmarks of psychopathic-like traits are also at particular risk of developing proactive aggression (Christian et al., 1997). Dadds Whiting and Hawes (2006) describes this as “predatory aggression” because it describes individuals on the lookout for an opportunity to be aggressive in order to further their own ends. Conversely, reactive aggression, which is retaliatory or impulsive and defensive in nature (Dodge, Lochman, Harnish, Bates, & Pettit, 1997), is more highly associated with disruptive school behavior (Brown, Atkins, Osborne, & Milnamow, 1996; Waschbusch, Willoughby, & Pelham, 1998) and peer rejection (Coie, Dodge, Terry, & Wright, 1991; Dodge & Coie, 1987; Waschbusch et al., 1998). Hence, it appears from the literature that the presence or absence of C/U traits and related interpersonal behaviors and proactive aggression are the key markers for psychopathy in children and adolescents.

## **Psychopathic-like Traits and Psychopathology: The Fledgling Psychopath Hypothesis**

The overlap between symptoms of psychopathology and psychopathic-like traits may mean that a young person is displaying general dysfunction rather than psychopathy (Salekin, 2006). In instances where young persons are diagnosed with an externalizing disorder such as Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD), this may particularly be the case. In a study involving 130 adolescent offenders, Salekin et al. (2004) found that psychopathy exhibited less comorbidity with internalizing disorders like depression and anxiety, as well as with other forms of psychopathology, than it did with CD or ODD. The nature of the relationship between psychopathic-like traits and psychopathology, particularly in regard to the disruptive behavior disorders, is important. Dolan (2004) designated the overlap between ODD, CD, and ADHD and the lifestyle and antisocial facets of psychopathy as particularly worthy of investigation. In addition, Frick, Bodin, and Barry (2000), identified narcissism and impulsivity as showing different associations with disruptive behavior disorders – the former being more related to ODD and the latter to ADHD.

The prognosis for children becomes markedly worse when HIA and CP are comorbid (Gresham, Lane, & Lambros, 2000). Specifically, children with HIA plus CP possess the worst features of both domains and consequently experience a variety of delinquent acts and more severe aggression in adolescence and more violent offending in adulthood than do those who are not comorbid for these diagnoses. Furthermore, Gresham et al. proposed that “children with HIA + CP are at heightened risk for the development of future psychopathology, as well as a host of additional adult adjustment problems including substance abuse, unemployment, divorce, accidents, and dependence on welfare” (p. 85).

As we mentioned at the conclusion of the previous chapter and earlier in the current chapter, it is this combination (HIA plus CP) that, according to Lynam (1996, 1998), constitutes a unique subgroup of *fledgling psychopaths*. Few people appear to have systematically investigated Lynam’s (1996) hypothesis to date, however. In one study, Barry et al. (2000) assessed 6- to 13-year-old clinic-referred children diagnosed with ADHD only, ADHD plus ODD/CD with low C/U traits, ADHD plus ODD/CD with high C/U traits, and clinic-referred controls (this latter group who were referred by teachers for emotional, behavioral, or learning problems did not meet the criteria for ADHD, CD, or ODD). A cutoff score of 7 out of 12 on the six-item C/U subscale of the Psychopathy Screening Device (Frick & Hare, 2001) was used to assign individuals as having high levels of C/U traits. Findings revealed that individuals with symptoms of ADHD plus CD/ODD with elevated rates of C/U traits (i.e., above the cutoff score) were most likely to show features associated with psychopathy. However, as the authors themselves acknowledged, their assessment of ADHD, CD, and ODD was reliant on teacher reports (to closely approximate the methodology used by Lynam, 1998), rather than any formal diagnosis and/or the use of multiple informants. In addition, the ADHD ( $n = 12$ ) and ODD/CD ( $n = 16$ ) groups were relatively small, thereby limiting the statistical analyses that could be conducted.

We now present our research specifically designed to investigate the Fledgling Psychopath Hypothesis. To do this, levels of psychopathy and aggression were compared between four groups of adolescent males. Three of the groups were clinical samples comprising boys with (i) CD who had also been diagnosed with ADHD; (ii) ADHD only; (iii) CD only; and one group was (iv) a nondiagnosed community sample. Thus, the design met the criteria posited by Gresham et al. (2000), who argued that in order to examine the presence of psychopathy (and aggression) within the ADHD and CD populations, it is ideal to have four groups (CD only, ADHD only, ADHD plus CD, and a nondiagnosed community sample) to use in contrast. In addition to the comparisons, a path analysis was also conducted in our research to explore the relationships between ADHD/CD symptoms ratings and levels of psychopathy and aggression. Given that psychopathy and aggression levels vary with age (and in light of our sample’s wide age range), age in years was included as an independent

variable to test whether any relationships between age and psychopathy/aggression were mediated by differences in ADHD and CD symptom levels.

Our study extended the earlier work of Barry et al. (2000) by incorporating a fourth group of children (CD only) in the sample and by only including individuals who had received a formal medical diagnosis (on the basis of information obtained from multiple informants) for ADHD only, CD only, or ADHD plus CD. Thus, in light of the Fledgling Psychopath Hypothesis, our prediction was that adolescents in the ADHD plus CD group were expected to have higher scores on both psychopathy and aggression than any of the other groups.

### **Study: Testing the Fledgling Psychopath Hypothesis**

Our sample consisted of 129 male adolescents aged 14–20 years ( $M = 16.5$ ,  $SD = 1.65$ ). Of these, 35 had received a clinical diagnosis by a pediatrician as meeting DSM-IV criteria for ADHD and had no diagnosed comorbid disorders (as assessed by clinical psychologists) or record of offending. Two groups were recruited from the main juvenile detention center and main remand center of a large Australian capital city. These were a group ( $N = 34$ ) with a diagnosis of CD only and a group ( $N = 18$ ) with a diagnosis of ADHD plus CD. These individuals had to have met appropriate DSM-IV diagnostic criteria as determined by the institutional medical staff and clinical/forensic psychologists. The length of incarceration for these adolescents, who had committed a range of theft and burglary, assault, and stealing of motor vehicle offenses, ranged from 2 days to 2.5 years (average detention = 52 weeks). To ensure that there were no medication masking effects in the testing sessions, all participants in the clinical groups were medication free for a minimum of 20 hours.

Forty-two adolescents with no diagnosed conditions drawn from one low to middle socioeconomic status high school made up the community comparison sample. None of these participants had received any clinical diagnoses, and none had been identified as “at risk of educational failure” in any of the yearly school screenings. Furthermore, according to school records, none had been identified during their school experience as having any academic or behavioral problems.

Participants were not included if they had other developmental or neurologic disorders or major sensorimotor difficulties. All participants were native English speakers and had normal hearing and normal or corrected vision. (Individuals with an Indigenous background were not included because of cultural issues.)

Three questionnaires were administered to all participants: The *Swanson, Nolan and Pelham Teacher and Parent Rating Scale-IV* (SNAP-IV; Swanson, 1995); The *Psychopathy Screening Device* (PSD; Frick, O’Brien, Wootton, & McBurnett, 1994), and the *Aggression Questionnaire* (AQ; Buss & Warren, 2000). Community comparison and ADHD-only participants completed the

AQ independently, but for the CD and ADHD plus CD groups, institutional teachers read the questions aloud to compensate for any reading difficulties of the participants.

The SNAP-IV (Swanson, 1995) was completed by parents, and the data were used to confirm the presence or absence of ADHD and/or CD symptoms. In total, 23 items were drawn from the scale, each of which corresponded with a relevant DSM-IV diagnostic criterion. Raters indicated for each item whether the participant exhibited the symptom “not at all,” “just a little,” “pretty much,” or “very much.” The SNAP-IV has been found to have high levels of concurrent validity with other rating scales (see Swanson, 1995), but few studies have examined its underlying factor structure or internal consistency of its subscales.

The PSD (Frick et al., 1994), currently named the *Antisocial Process Screening Device* (APSD; Frick & Hare, 2001), is a 20-item adaptation of the adult *Psychopathy Checklist – Revised* (PCL-R; Hare, 1991). This was completed by each participant’s regular teacher. Items are arranged on a 3-point scale anchored with the words “Not at all True,” “Sometimes True,” and “Definitely True.” Three dimensions of psychopathy are reportedly assessed by the PSD: (i) empathy and a callous and unemotional interpersonal style; (ii) impulsivity; and (iii) narcissism. One item (“lies easily and skillfully”) has failed to load in previous analyses, and in light of its ambiguous nature, our study only used the remaining 19 items.

The AQ (Buss & Warren, 2000) uses a 5-point scale anchored with the response options “Not at all like me” to “Completely like me” to assess trait aggression. The 34 self-report items comprising the AQ are organized into five subscales, which measure physical aggression (e.g., use of physical force when expressing anger or aggression), verbal aggression (e.g., quarrelsome and hostile speech), indirect aggression (e.g., expressing anger in actions that avoid direct confrontation), hostility (e.g., pervasive social maladjustment, and severe psychopathology and mental illness), and anger (e.g., difficulties controlling one’s temper, getting angry for no good reason). We chose to only administer the three AQ subscales (17 items) that focused on different manifestations of aggression (i.e., physical, verbal, and indirect) rather than its antecedent psychological or affective states (i.e., anger and hostility).

Prior to the research being conducted, permission was obtained from the Institution’s Human Research and Ethics Committee. All tests were administered to the ADHD and community groups by experienced psychologists. For the CD and the ADHD plus CD groups, however, institutional teachers had established rapport with these individuals and so were better placed to complete the testing procedures. In this instance, verbal instructions were provided, and this was followed up with standardized written instructions. Teachers and parents completed the PSD and SNAP-IV, respectively, for all participants.

Our analyses consisted of three major stages. First, we examined the properties of the measuring instruments, and only an abridged version that covers the salient points is given here. Second, scores for the four diagnostic groups on the PSD and the AQ were compared with test predictions implied by the Fledgling Psychopath Hypothesis. In stage III, a further test of this hypothesis was

conducted by examining correlations between subscale scores on the SNAP-IV, the PSD, and the AQ.

A combination of confirmatory and exploratory factor analysis methods were used to identify any severe digressions from proposed scale structures that would render the instruments unsuitable for use in the study. All confirmatory factor models were tested using LISREL 8.50 (Jöreskog & Sörbom, 2001), and SPSS 11.5 (SPSS Inc., 2003) was used for all exploratory factor models.

An exploratory factor analysis with maximum likelihood estimation was used for the SNAP-IV, and the resulting solution was rotated using an orthogonal (varimax) procedure because the SNAP-IV subscales are assumed to represent relatively independent dimensions of ADHD and CD symptomatology. As is clear in Table 8.1, three factors, which together accounted for 66.4% of the total score variance, represented the IA (Inattentive), H/I (Hyperactive/Impulsive), and CD dimensions of the scale. Thus, response patterns to the SNAP-IV items used in our study were well aligned with the original scale structure.

Because later analyses relied on distinguishing between symptoms on the three ADHD/CD indices, the solution was also used to generate uncorrelated SNAP-IV

**Table 8.1** Rotated factor loadings for items in the SNAP-IV

Item no.	Item label	Rotated factor loadings		
		Factor I	Factor II	Factor III
SNAP5	IA5	<u>.851</u>	.237	.087
SNAP4	IA4	<u>.831</u>	.243	.234
SNAP2	IA2	<u>.814</u>	.255	.129
SNAP6	IA6	<u>.798</u>	.190	.278
SNAP9	IA9	<u>.744</u>	.257	.066
SNAP7	IA7	<u>.742</u>	.296	.067
SNAP1	IA1	<u>.714</u>	.274	.065
SNAP3	IA3	<u>.712</u>	.300	.305
SNAP8	IA8	<u>.680</u>	.282	.190
SNAP16	H/17	.236	<u>.806</u>	-.006
SNAP17	H/18	.249	<u>.789</u>	.195
SNAP14	H/15	.259	<u>.780</u>	.058
SNAP7	H/16	.358	<u>.765</u>	.033
SNAP18	H/19	.357	<u>.739</u>	.158
SNAP13	H/14	.223	<u>.704</u>	.234
SNAP12	H/13	.176	<u>.612</u>	.377
SNAP11	H/12	.242	<u>.608</u>	.363
SNAP10	H/11	.478	<u>.556</u>	-.028
SNAP23	CD5	-.004	.106	<u>.880</u>
SNAP22	CD4	.126	.067	<u>.866</u>
SNAP21	CD3	.187	.053	<u>.797</u>
SNAP20	CD2	.186	.150	<u>.701</u>
SNAP19	CD1	.221	.322	<u>.607</u>

Underlining denotes Factor

IA: Inattentive

H/I: Hyperactive/Impulsive

CD: Conduct Disorder



factor scores. Data were examined both within groups and across the full study sample, and in the case of the latter there was evidence of substantial positive skew on scores for the H/I and CD subscales. Transformations were thereby performed on the varimax-rotated scores, and the rescaled factor scores correlated very highly with raw subscale scores. Estimates of reliability were also high for the three resulting subscales, with  $\alpha = .95, .93,$  and  $.89$  for the IA, H/I, and CD subscales, respectively.

The pattern of scores on the SNAP-IV across the four sample groups indicated that participants' symptom ratings were not entirely consistent with their diagnostic classifications. It was therefore necessary to conduct two kinds of analyses in examining the relationship between ADHD/CD and psychopathy/aggression levels; one based on diagnostic classifications, the other based on the SNAP-IV IA, H/I, and CD symptom ratings.

The covariance matrix of the PSD item scores was subjected to a confirmatory factor analysis using LISREL 8.50 (Jöreskog & Sörbom, 2001) to determine which of the previously described models was most suitable for use in our study. Three models were compared, two- and three-factor models and a one-factor model in which all PSD items loaded on a single factor. Results for the three initial confirmatory factor analyses on the PSD are summarized in Table 8.2.

As is evident, the one-factor model clearly did not fit the data well. The two-factor produced a significant reduction in  $\chi^2$  over the one-factor ( $\Delta\chi^2 = 68.420$ ,  $\Delta df = 1$ ,  $p < .001$ ), but the reduction in  $\chi^2$  associated with the addition of a third factor was not significant at  $\alpha = .001$  ( $\Delta\chi^2 = 9.574$ ,  $\Delta df = 2$ ). The three-factor model also indicated a very high correlation between the NARC (Narcissism) and IMP (Impulsivity) factors,  $r(127) = .893$ ,  $p < .001$ . Correlations between the combined N/I (Narcissism/Impulsivity) subscale and individual NARC and IMP subscales were also very high (Table 8.3). These results are consistent with those reported by Frick et al. (2000b). In light of these outcomes, the two-factor model was considered to be more tenable for use in our study.

As indicated in Table 8.2, the fit of the initial two-factor was moderately good. The standardized path coefficients and standard errors (in parentheses) in the final model, which are shown in Fig. 8.1, indicate good correspondence between response patterns within our study sample and the specified PSD scale structure.

**Table 8.2** Fit statistics and indices for four CFA models on the PSD

Model	$\chi^2$	df	$\chi^2/df$	SRMR	GFI	NNFI	CFI
One-factor (PSD)	305.510	135	2.263	.086	.766	.778	.804
Two-factor (N/I, C/U)	237.090	134	1.769	.074	.815	.865	.881
Three-factor (NARC, IMP, C/U)	227.516	132	1.724	.073	.828	.873	.890
Modified two-factor (see Fig. 8.2)	201.334	132	1.525	.069	.850	.908	.920

CFA: Confirmatory Factor Analysis

PSD: Psychopathy Screening Device

SRMR: Standardized Root Mean Residual

GFI: Goodness of Fit Index

NNFI: Non Normed Fit Index

CFI: Comparative Fit Index

**Table 8.3** Full-sample descriptive statistics and correlations for PSD subscales

Subscale	N	M	SD	$\alpha$	NARC	IMP	N/I	C/U
NARC	129	0.587	0.520	.863	–	.729*	.951*	.548*
IMP	129	1.023	0.532	.750		–	.906*	.473*
N/I	129	0.769	0.489	.892			–	.554*
C/U	129	0.713	0.442	.746				–

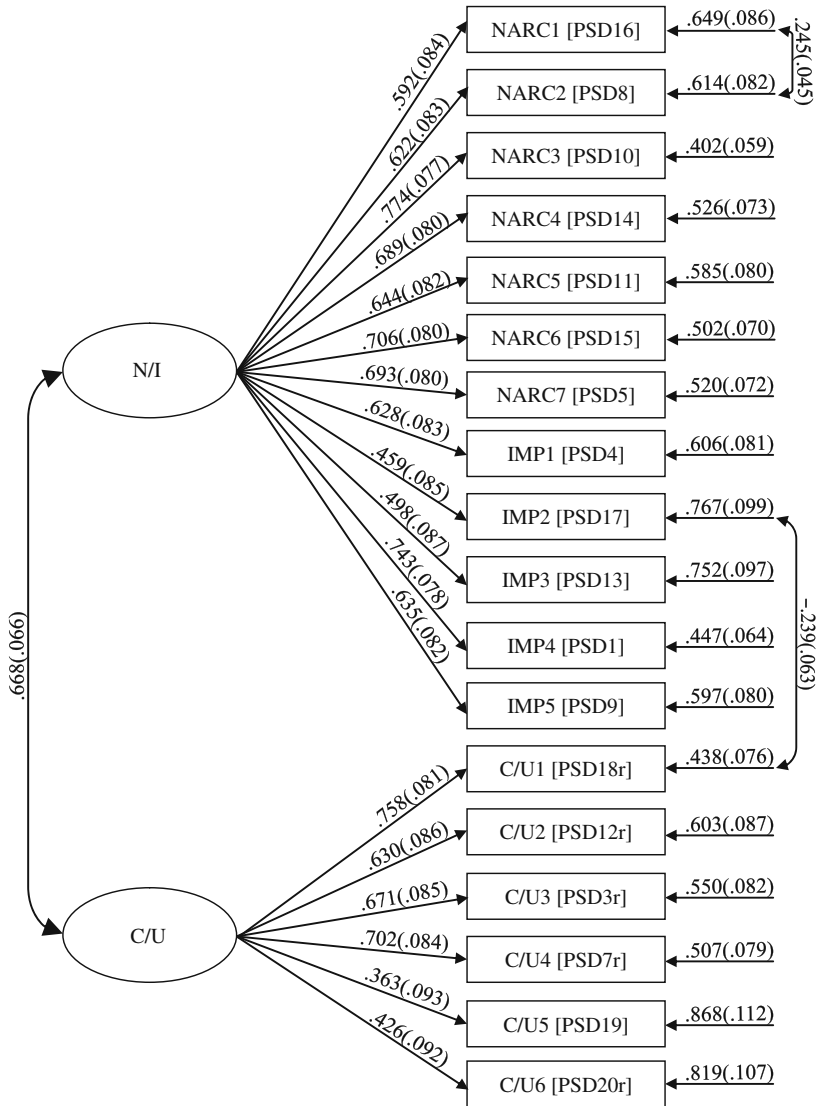
\*Significant at  $\alpha = .01$ .

NARC: Narcissism

IMP: Impulsivity

N/I: Narcissism/Impulsivity

C/U: Callons/Unemotional



**Fig. 8.1** Path coefficients for two-factor model of the PSD

**Table 8.4** Rotated factor loadings for items in the AQ

Item no.	Subscale	Rotated factor loadings		
		Factor I	Factor II	Factor III
AQ11	PHY3	<u>.846</u>	.136	.123
AQ8	PHY1	<u>.809</u>	.190	.077
AQ23	PHY5	<u>.684</u>	.194	.298
AQ25	PHY7	<u>.610</u>	.212	.031
AQ17	PHY4	<u>.595</u>	.221	.541
AQ24	PHY6	<u>.594</u>	.205	.140
AQ10	PHY2	<u>.583</u>	.269	.411
AQ27	PHY8	<u>.536</u>	.148	.372
AQ13	IND1	<u>.458</u>	.205	.394
AQ1	VER1	.099	<u>.778</u>	.018
AQ4	VER2	.203	<u>.629</u>	.129
AQ6	VER3	.263	<u>.627</u>	.199
AQ20	VER4	.332	<u>.413</u>	.269
AQ15	IND3	.202	.125	<u>.663</u>
AQ30	IND5	-.009	.023	<u>.498</u>
AQ14	IND2	.468	.326	<u>.469</u>
AQ18	IND4	.247	.195	<u>.275</u>

PHY, physical aggression; IND, indirect aggression; VER, verbal aggression.  
Underlining Denotes Factors

An exploratory factor analysis with maximum likelihood extraction indicated the presence of three factors for the AQ that were generally consistent with the original subscale compositions (Buss & Warren, 2000). Two items were deleted after this initial run, however: one from the IND (Indirect) subscale (AQ34: “I like to play practical jokes”), and the other from the VER (Verbal) subscale (AQ26: “I tell my friends openly when I disagree with them”). Outcomes of a second factor analysis on the AQ, shown in Table 8.4, indicated loading patterns consistent with the original subscale designations, although as found by Buss and Warren (2000), several items showed significant cross-loadings.

The factor scores for all three subscales were then rescaled to reflect the means of the original (raw score) PHY (Physical), VER, and IND subscales. Table 8.5 shows that the transformed factor scores were highly correlated with the raw subscale scores and that alpha coefficients were high for the final PHY and VER subscales ( $\alpha = .90$  and  $.75$ , respectively), although somewhat lower for the IND subscale ( $\alpha = .62$ ). This may reflect the relatively low number of items in this scale. Thus, the outcomes of further analyses on this subscale may reflect some degree of power attenuation due to low internal consistency.

## Diagnostic Group Differences in Levels of Psychopathy and Aggression

Bearing in mind the Fledgling Psychopath Hypothesis, adolescents in the ADHD plus CD group were expected to have higher scores on both the PSD and the AQ than any of the other groups. The combination of multivariate

**Table 8.5** Descriptive statistics and correlations for subscales of the AQ

Subscale	Form	N	M	SD	PHY		VER		IND	
					Raw	Factor	Raw	Factor	Raw	Factor
PHY	Raw	129	2.572	0.926	–	.892*	–.003	.278*	.094	.397*
	Factor	129	2.572	1.066		–	.268*	.533*	.353*	.639*
VER	Raw	129	2.743	0.862			–	.791*	.098	.371*
	Factor	129	2.743	0.892				–	.297*	.573*
IND	Raw	129	2.479	0.833					–	.756*
	Factor	129	2.479	0.817						–

PHY, physical aggression; VER, verbal aggression; IND, indirect aggression.  
 \*Significant at  $\alpha = .01$ .

analysis of variance (MANOVA) and univariate analysis of variance (ANOVA) methods used for the diagnostic group comparisons initially incorporated age as a covariate.

Because of large age differences across groups, each full sample analysis was replicated on a subsample of age-matched participants from each diagnostic group. To create these subsamples, ADHD plus CD participants (who represented the smallest *n* cell) were selected as the reference group. For each member of this group, a random selection of one member (of the same age or the closest available) from each of the other three groups was made; no matches were available for the five 19-year-old individuals in the ADHD plus CD group, and so they were excluded from the matched sample analysis. Thus, there were *n* = 13 per group (total *N* = 52). No significant age differences across groups in the matched age sample [ $F(3, 48) < 1$ ] were found. Given the reduced power levels that resulted from this process, the age-matched sample analyses provided stringent confirmatory tests of any group differences identified in the full sample analyses.

Descriptive statistics for psychopathy (PSD scores) by diagnostic group are shown in Table 8.6. As expected, a MANOVA revealed a significant multivariate effect of diagnostic group,  $V = .366, F(6, 250) = 9.337, p < .05$ . Using a Bonferroni-adjusted  $\alpha$  level of .025, significant univariate effects for diagnostic

**Table 8.6** Descriptive statistics for PSD subscales by diagnostic group

Subscale	Diagnostic group	N	M	SD
Narcissism/impulsivity (N/I)	ADHD	35	0.970	0.283
	Community	42	0.409	0.411
	ADHD plus CD	18	1.045	0.480
	CD	34	0.861	0.510
	Total	129	0.769	0.489
Callous/unemotional (C/U)	ADHD	35	0.639	0.354
	Community	42	0.573	0.498
	ADHD plus CD	18	0.957	0.330
	CD	34	0.833	0.433
	Total	129	0.713	0.442

**Table 8.7** Univariate ANOVAs on PSD subscales by diagnostic group

Source	Subscale	df	MS	<i>F</i>	Partial $\eta^2$
Diagnostic group	N/I	3	2.837	16.006*	0.278
	C/U	3	0.858	4.772*	0.103
Error	N/I	125	0.177		
	C/U	125	0.180		

N/I, narcissism/impulsivity; C/U, callous/unemotional.

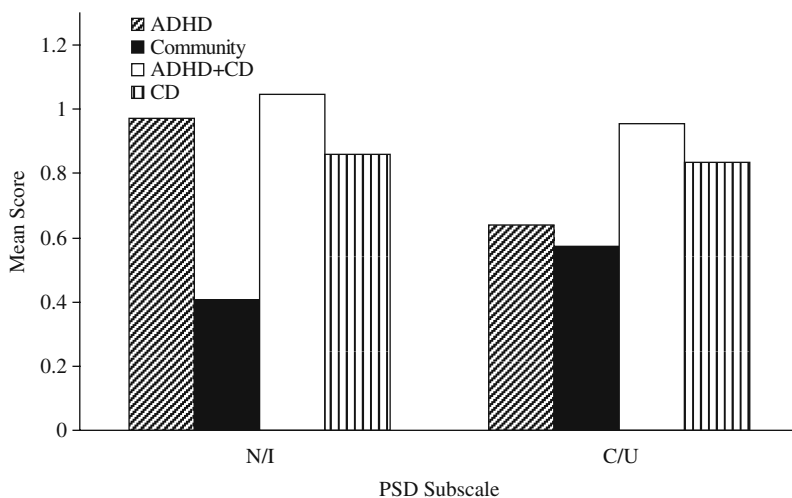
\*Significant at  $\alpha = .025$ .

MS, Mean Square

group were found on both subscales (see Table 8.7). These effects remained significant at stepdown, regardless of the order in which the variables were entered,  $F$ 's (3, 124)  $\geq 4.177$ ,  $p$ 's  $\leq .007$ . The magnitude of the effect on the N/I subscale was particularly substantial, with diagnostic group accounting for 27.8% of the score variance on this measure.

The pattern of means across the groups on the PSD subscales is shown in Fig. 8.2. Tukey post hoc tests indicated that all three clinical groups had significantly higher scores than did the community sample on the N/I subscale ( $p$ 's  $< .025$ ) but did not differ significantly from one another ( $p$ 's  $\geq .442$ ). On the C/U subscale, participants in the ADHD plus CD group scored significantly higher than did those in the community sample ( $p = .009$ ) and marginally higher than did those in the ADHD-only sample ( $p = .052$ ). The CD group scored marginally higher than did the community sample on this measure, although this difference again only approached significance at the .025 level ( $p = .044$ ). All other differences on this measure were not significant ( $p$ 's  $\geq .231$ ).

In the matched samples analyses of the PSD, a very similar pattern of differences emerged. Again, there was a significant multivariate effect of diagnostic



**Fig. 8.2** Patterns of means across the groups on the PSD subscales

group,  $V = .597$ ,  $F(6, 96) = 6.809$ ,  $p < .05$ . Univariate ANOVAs indicated significant group differences on the N/I [ $F(3, 48) = 10.329$ ,  $p < .025$ , partial  $\eta^2 = .392$ ] and C/U [ $F(3, 48) = 5.837$ ,  $p < .025$ , partial  $\eta^2 = .267$ ] subscales. Again, both of these effects were significant at stepdown with  $F$ 's (4, 47)  $\geq 4.055$ ,  $p$ 's  $< .025$ . As in the full sample analysis, on the N/I subscale all clinical groups scored significantly higher than did the community sample ( $p$ 's  $\leq .006$ ), but did not differ significantly from one another ( $p$ 's  $\geq .296$ ). There were again marginal differences between the CD group and the community group ( $p = .027$ ) on the C/U measure, but this time the ADHD plus CD group scored significantly higher than did *both* the community *and* the ADHD groups ( $p$ 's  $\leq .022$ ).

Because the aggression factor scores used to represent the three AQ subscales (PHY, VER, and IND) were orthogonal, a series of univariate ANOVAs was used to compare the diagnostic groups. Bonferroni-adjusted  $\alpha$  levels of .016 were then used in the interpretation of these effects. Group means and standard deviations for scores on this measure are shown in Table 8.8.

Univariate ANOVAs (Table 8.9) revealed that the only clear difference between groups in terms of aggression was a significantly higher mean score for the CD group ( $p = .009$ ) over the community group on the PHY subscale. No other differences approached significance at the .016 level on this scale (all  $p$ 's  $\geq .238$ ). The pattern of means across groups on the AQ subscales is shown in Fig. 8.3.

The analysis of the matched sample data using ANOVAs also indicated that the only significant differences between the diagnostic groups was on the PHY subscale,  $F(3, 48) = 5.918$ ,  $p < .016$ , partial  $\eta^2 = .270$ . In this case, as demonstrated by post hoc tests, the CD group had significantly higher scores than did the community *or* the ADHD groups ( $p$ 's  $\leq .008$ ).

**Table 8.8** Descriptive statistics for AQ subscales by diagnostic group

Subscale	Diagnostic group	<i>N</i>	<i>M</i>	<i>SD</i>
Physical aggression (PHY)	ADHD	35	2.389	1.111
	Community	42	2.309	0.815
	ADHD plus CD	18	2.784	0.656
	CD	34	2.973	0.835
	Total	129	2.572	0.926
Verbal aggression (VER)	ADHD	35	2.699	0.899
	Community	42	2.782	0.837
	ADHD plus CD	18	2.692	1.007
	CD	34	2.768	0.808
	Total	129	2.743	0.862
Indirect aggression (IND)	ADHD	35	2.399	0.683
	Community	42	2.259	0.754
	ADHD plus CD	18	2.786	0.960
	CD	34	2.670	0.933
	Total	129	2.479	0.833

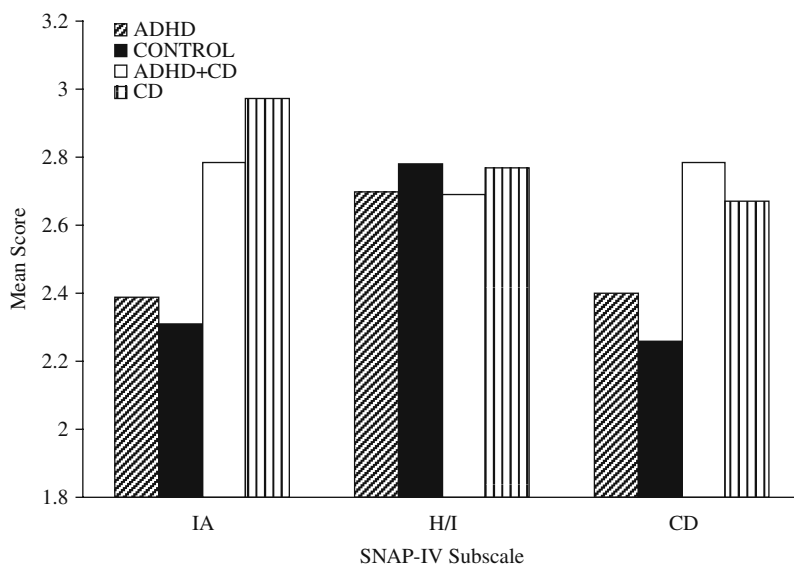
**Table 8.9** Univariate ANOVAs on the AQ subscales

Source	Subscale	df	MS	<i>F</i>	Partial $\eta^2$
Diagnostic group	PHY	3	3.455	4.340*	0.094
	VER	3	0.066	0.087	0.002
	IND	3	1.730	2.589	0.059
Error	PHY	125	0.796		
	VER	125	0.760		
	IND	125	0.668		

PHY, physical aggression; VER, verbal aggression; IND, indirect aggression.

\*Significant at  $\alpha = .016$ .

MS, Mean Square



**Fig. 8.3** Mean scores on the AQ across diagnostic groups

### Relationships Between Levels of ADHD/CD Symptomatology, Psychopathy, and Aggression

The Fledgling Psychopath Hypothesis did not receive strong support from the group comparisons. As noted in research to date, however, interpretations of diagnostic group comparisons can be hampered by the variability that exists naturally within the ADHD population. Information on ADHD subtypes was not available in our research. Furthermore, group comparison tests performed on the SNAP-IV were not entirely consistent with diagnostic classifications (the ADHD plus CD group did not differ significantly from the CD-only group on either of the IA and H/I ADHD indices), and there was also variability in the severity of symptoms reported *within* these groups, particularly on the H/I

subscale. Thus, a path analysis was conducted to further test the predictions of the Fledgling Psychopath Hypothesis.

In this instance, we also examined relationships between psychopathy and aggression and levels of ADHD/CD symptomatology. To do this, we did not operationalize ADHD and CD as disorders that were either present or absent within certain groups but rather as characteristics present to a certain level in all study participants. Scores on the two ADHD subscales of the SNAP-IV (IA and H/I), along with the SNAP-IV CD subscale, were used to provide a direct index of symptom severity in each of these three areas.

We also sought to determine whether a significant unique proportion of variance in PSD and AQ scores (i.e., over and above the variance associated with base levels of ADHD/CD symptoms) were accounted for by the combination of IA, H/I, and CD symptom levels as predicted by the Fledgling Psychopath Hypothesis. To do this, a new score was created for each participant to represent the three-way  $IA \times H/I \times CD$  interaction. This variable was then orthogonalized against scores for the base IA, H/I, and CD subscales. Scores on the N/I subscale were also orthogonalized against scores on the C/U subscale to preclude any problems associated with multicollinearity in the model.

All four SNAP-IV variables were entered for Panel I of the path model, followed by Panel II (PSD) and then Panel III (AQ) scores. The unstandardized path coefficients and standard errors (in parentheses) for each effect tested in the model are shown in Table 8.10. Significance was tested at the .05 level; effects that approached significance at this level ( $p < .010$ ) are indicated separately.

Most indices indicated adequate model fit (e.g., SRMR [Standardized Root Mean Residual] = .048, GFI [Goodness of Fit Index] = .958, RMSEA [Root Mean Square Error of Approximation] = .0x), although the  $\chi^2/df$  ratio was somewhat high for the overall model tested ( $\chi^2/df = 6.255$ ). The path diagram of significant direct relationships in the model (non-significant paths tested shown in grayscale; effects that approached significance at .05 represented by dashed lines) are shown in Fig. 8.4. As can be seen, although the effect of H/I on C/U only approached significance at the .05 level, all three SNAP-IV indices had positive direct effects on the PSD subscales. None, however, had significant direct effects on the AQ subscales. Rather, as is evident in Table 8.10, all three standardized SNAP-IV variables impacted PHY indirectly through C/U (again, the effect of H/I was marginal on this variable).

Although the effect of the three-way  $IA \times H/I \times CD$  interaction on the AQ IND subscale approached significance at  $\alpha = .05$ , no significant direct or indirect effects in the model through the  $IA \times H/I \times CD$  interaction were evident. Overall, therefore, the results of the path analysis did *not* support the predictions implied by the Fledgling Psychopath Hypothesis.

In examining our findings, the instruments used generally exhibited sound psychometric properties, and the results for the PSD and the AQ were well aligned with previous evaluations. However, results for both measures suggest that the subscales may be less distinct in adolescent populations than in adult populations. Concerns raised by Salekin (2002, 2006) and Johnstone and Cooke



**Table 8.10** Summary of direct and indirect effects in the path model

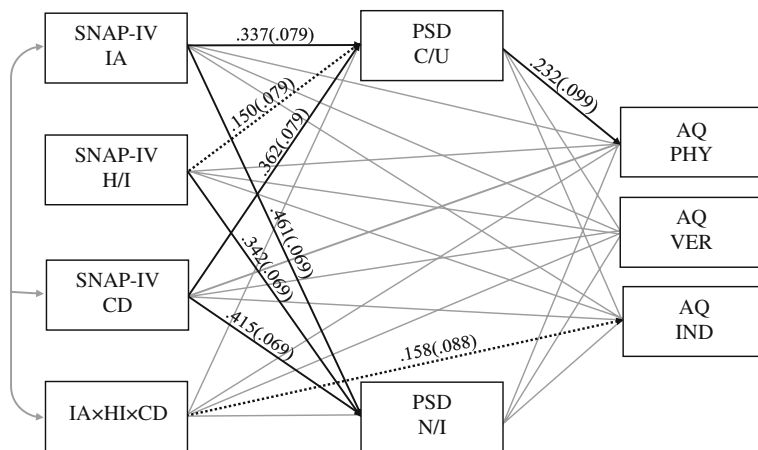
Outcome variable	Type of effect	Effect variable									
		R <sup>2</sup>	IA × H/I × CD	IA	H/I	CD	N/I	C/U			
N/I	Direct	.419	-.002 (.034)	.194 (.029)*	.146 (.029)*	.176 (.029)*					
C/U	Direct	.233	.033 (.043)	.155 (.036)*	.070 (.037)†	.168 (.037)*					
PHY	Direct	.072	-.024 (.100)	-.177 (.104)	.003 (.095)	-.048 (.103)	.341 (.261)				.491 (.209)*
VER	Indirect		.015 (.025)	.142 (.064)*	.084 (.046)†	.142 (.061)*					
	Direct	.030	.064 (.094)	.071 (.098)	.090 (.089)	.148 (.097)	-.198 (.246)				.028 (.197)
IND	Indirect		.001 (.009)	-.034 (.057)	-.027 (.039)	-.030 (.055)					
	Direct	.050	.162 (.090)†	.086 (.094)	.108 (.086)	.134 (.093)	-.088 (.236)				-.184 (.188)
	Indirect		-.006 (.010)	-.046 (.055)	-.026 (.038)	-.046 (.053)					

N/I, narcissism/impulsivity; C/U, callous/unemotional; PHY, physical aggression; VER, verbal aggression; IND, indirect aggression.

\*Significant at  $\alpha = .05$ .

† Approached significance at  $\alpha = .05$  ( $p < .010$ ).

IA: Inattentive; H/I: Hyperactive/Impulsive; CD: Conduct Disorder



**Fig. 8.4** Path diagram of significant direct relationships between ADHD/CD symptom ratings, psychopathy, and aggression

(2004) in relation to the ad hoc downward extension of psychopathy to children and adolescents and that the conceptual and empirical properties of the childhood instruments may not be developmentally informed appear salient.

The ADHD plus CD group was expected to exhibit higher levels of psychopathy than was *either* the ADHD-only *or* the CD-only group as predicted by the Fledgling Psychopath Hypothesis. Higher scores on the N/I subscale of the PSD were clearly evident for all three clinical groups (ADHD plus CD and ADHD/CD only) over the community sample on the group comparisons. The three clinical groups did not, however, differ significantly on this measure. This may reflect the composition of items on the N/I subscale, which relate both to narcissism and impulsivity. It may be (even expected) that adolescents with ADHD would score higher on impulsivity items (e.g., acts without thinking, does not plan ahead), whereas adolescents with CD would score higher on those measuring narcissism (e.g., becomes angry when corrected, teases others).

The presence (or absence) of C/U traits is generally considered to be the key marker for psychopathy in children and adolescents (see Barry et al., 2000; Frick, Cornell, Bodin, Dane, Barry & Loney, 2003; Loney, Frick, Clements, Ellis, & Kerlin, 2003; Silverthorn & Frick, 1999). In our test of the hypothesis, higher scores were obtained by ADHD plus CD participants on the C/U subscale compared with the community sample and marginally higher scores compared with ADHD-only participants. When samples were matched, the latter difference reached significance at  $p < .025$ . However, ADHD plus CD participants again did not differ significantly from participants in the CD-only group in terms of C/U scores. In fact, the latter group also reported marginally higher scores on this measure than did ADHD-only and community participants. Thus, our findings in relation to the key marker of C/U traits indicated

only one of the differences that would be required for confirmation of the Fledgling Psychopath Hypothesis.

The only significant between-groups difference was for physical aggression. In the full sample analysis, the CD group scored higher than did the community sample. In the matched samples analysis, however, there was also a significant difference between the CD-only and ADHD-only groups, which given that physical aggression is a hallmark of CD (e.g., uses a weapon in fights) is not surprising. Conversely, the failure to find a significant difference between the ADHD plus CD group and the non-CD samples was surprising. The statistical power of the comparisons for the ADHD plus CD group was lower because of its relatively small sample size, and therefore a degree of caution is warranted in the interpretation of the latter result.

Overall, the group comparison analyses did not offer strong support for the predictions implied by the Fledgling Psychopath Hypothesis. With the one exception of ADHD plus CD reporting marginally higher scores on the C/U subscale of the PSD compared with participants with ADHD only, higher levels of psychopathy or aggression were generally not exhibited by adolescents with comorbid ADHD plus CD compared with those diagnosed with *either* disorder alone. Given the variation in findings from the full sample compared with the matched sample, the overall pattern of results provides only mixed support for the predictions made.

The outcomes of the path analysis were also not consistent with the predictions made. No significant direct relationships were evident between ADHD/CD symptoms and aggression. Although our multivariate analyses indicated higher scores for CD only (and, to a lesser extent, the ADHD plus CD group) than for the ADHD-only and community samples, the path analysis indicated that these symptoms affected physical aggression only through scores on the C/U dimension. It is possible that these modest results reflect the relatively moderate content of the AQ PHY subscale. For instance, many a non-conduct-disordered child may respond positively to the item "I have become so mad that I have broken things." A measure focusing on more severe forms of physical aggression may therefore have brought about stronger observed relationships.

Contrary to expectations, the three-way interaction of IA×H/I×CD symptoms was shown through the path analysis to have no significant direct effects on PSD or AQ subscale scores, although one effect (on the IND subscale of the AQ) did approach significance at the .05 level. Thus, there was no evidence that the three-way interaction between IA, H/I, and CD symptom levels had effects on psychopathy or aggression levels over and above those associated with base levels on these individual dimensions. Overall, therefore, the results of this analysis also did not support the predictions made on the basis of the Fledgling Psychopath Hypothesis.

Returning to the group comparisons, the findings do suggest a tentative link between the combination of ADHD/CD symptoms and C/U *as it is measured by the PSD*. Indeed, in terms of the construct of psychopathy (as currently

defined in children and adolescents), the PSD items correspond well. However, some C/U items in the PSD (e.g., being unconcerned about schoolwork, failing to keep promises) would be exhibited by the majority of children and adolescents at one time or another. Furthermore, considerable overlap exists in the characteristics associated with the narcissism/impulsivity dimension and the diagnostic criteria for ADHD. In light of this, it is not surprising that groups differed significantly on this variable and that there was a strong relationship between ADHD symptoms and scores on the N/I subscale in the path analysis. The evidence concerning the Fledgling Psychopath Hypothesis is therefore not as clear as anticipated.

## Concluding Comments

At the outset of this chapter, we discussed the existence of a subgroup of young persons who according to researchers are at particular risk of adversity because of a combination of psychopathology and facets of antisocial lifestyle. These young individuals were labeled as *fledgling psychopaths*, which we suggested opened them to more adverse outcomes because of the reputation the name implies. Although research evidence regarding reputation enhancement and psychopathy appears to be nonexistent, with one of our colleagues we have recently obtained the first empirical evidence pertaining to this (Tan, 2008). Data were gathered from a sample of 150 mainstream high school students, 73 of who had been suspended from school for physical and/or verbal assault of teachers or peers. All students completed the Child and Adolescent Psychopathy Screening Instrument (Houghton et al., 2007), a 43-item (scored from 0 to 3) teacher report form comprising four subscales measuring callous/unemotionality, narcissism, moral disengagement of self, and sensation seeking. Participants were identified as having an elevated C/U score if their mean score exceeded 1 SD of the mean ( $M = .85$ ,  $SD = .48$ ). Of the 150 students, 26 (17%) had elevated C/U scores and when compared with individuals with nonelevated C/U scores, there were highly significant differences on eight reputation-enhancement variables. For example, both males and females with elevated C/U scores described themselves as being delinquent, mean, tough and as breaking rules, and admiring others involved in similar acts of social deviancy. They also wanted others to view them as nonconforming and as having a bad reputation, and they did not communicate positive or negative events to anyone.

When compared with the reputational orientations of delinquent and nondelinquent youth in our extensive previous research, some interesting differences emerge. For example, young persons involved in delinquency are similar to our high C/U sample in that they tend to admire law-breaking behavior (e.g., fighting, stealing, drug taking), perceive themselves as nonconforming (e.g., breaking rules, bad reputation), and ideally want to be perceived

in this manner. What is different, however, is that our high C/U individuals do not inform their peers of their behavior (see Carroll et al., 2003). In comparison with loners (Houghton et al., 2008), several differences are also evident. Our high C/U individuals were similar to loners in that they clearly express a desire to establish a deviant and nonconforming reputation, however loners appear to be less concerned about how others perceive them and also about how they perceive others. Unlike our high C/U individuals (and general delinquents), loners tend to be characterized by a desire to appear as neither conforming nor nonconforming in public; privately, however, their desire is to be nonconforming. Moreover, loners are less willing to communicate their prosocial behavior to friends, parents, and/or other adults.

Our investigation of the Fledgling Psychopath Hypothesis did provide some tentative support and at the same time highlighted a number of concerns over the instrumentation used to measure this construct. Nevertheless, the very name applied to these young persons foreshadows a reputation characterized by aggression, infringing the norms of society and the rights of others, and of leaving a trail of destruction behind them with no regard for the consequences of their behavior on others. Throughout our book, we have placed great emphasis on the significance of reputation to young people and particularly those who engage in delinquent and high-risk activities. Except for the evidence presented in this chapter, the field of reputation enhancement in the context of children and adolescents with psychopathic-like traits remains unexplored, and hence the potential for the development of new social-psychological-based treatments has not been optimized. Such an approach should not be taken lightly, as Harris and Rice (2006) suggested that not only may the highest risk offenders (i.e., psychopaths) *not* be treatable (despite intensive, well-designed programs), but also some current programs could possibly increase the likelihood of their re-offending. This is not to say that treatments for juvenile delinquents with psychopathic-like traits are not available. For example, Harris and Rice (2006) posited that the best intervention for these young people is Multisystemic Therapy (MST), which we review along with a range of other interventions in the next chapter.

## Chapter 9

# Treatment and Interventions for Young Persons at Risk

There are numerous examples of interventions for youth at risk, including family treatments (Quinn & van Dyke, 2004; Schaeffer & Borduin, 2005; Scherer, 1994), parent-training programs (Bank, Marlowe, Reid, Patterson, & Weinrott, 1991), school-based programs (Freiberg et al., 2005; Frey, Nolen, Van Schoiack Edstrom, & Hirschstein, 2005; Homel et al., 2006), youth justice conferencing (Luke & Lind, 2002; Stewart & Smith, 2004), individual- and group-based cognitive-behavioral programs (Kendall, Reber, McLeer, Epps, & Ronan, 1990; Rohde, Jorgensen, Seeley, & Mace, 2004), and wilderness-type adventure programs (Burdsal & Buel, 1980; Wilson & Lipsey, 2000; Wilson & MacKenzie, 2006). In this chapter, the types of interventions implemented and the outcomes of these are reviewed. We also examine interactive multimedia-based programs because of the increasing interest in their use and then detail our own such program – *Mindfields: A Self-Regulatory Intervention to Empower Young People at Risk to Change Their Lives*. We conclude the chapter by examining characteristics of effective intervention programs for young people at risk.

### Parent Training and Family Interventions

The role of ineffective family practices in the etiology of juvenile delinquency is well documented (see Chapter 1; McWhirter et al., 2007; Siegel et al., 2006; Withers & Russell, 2001). Family and parenting interventions are typically premised on the assumption that if family relationships are appropriately mobilized, they can be a potent therapeutic agent for reducing unwanted behaviors and preventing relapse (Woolfenden, Williams, & Peat, 2001). The numerous family and parenting interventions for delinquency range from parent-training programs to multisystemic therapy (MST) (or multidimensional family therapy; MDFT) (Bank et al., 1991; Borduin et al., 1995; Chamberlian & Reid, 1998; Emshoff, 1983; Henggeler, Melton, & Smith, 1992; Henggeler, Melton, Brondino, Scherer, & Hanley, 1997; Quinn & van Dyke, 2004; Schaeffer & Borduin, 2005; Scherer, 1994).

Schaeffer and Borduin (2005) conducted a long-term follow-up (approximately 14 years later, when participants were on average 28.8 years of age) of

176 serious adolescent offenders who had received either MST or individual therapy in an earlier randomized clinical trial (Borduin et al., 1995). Results showed that participants who had received MST had significantly lower recidivism rates at follow-up than did their counterparts who participated in individual therapy (50% vs. 81%, respectively). Moreover, MST participants had 54% fewer arrests and 57% fewer days of confinement in adult detention facilities. This investigation, which represents the longest follow-up to date of a MST clinical trial, suggests that MST is relatively effective in reducing criminal activity among serious and violent juvenile offenders. The authors concluded the long-term effectiveness of MST was due to administration of the treatment in a community setting, improved family support, and decreased deviant peer involvement (Schaeffer & Borduin, 2005).

The original study referred to above (Borduin et al., 1995) revealed that when it came to improving key family issues and adjustment problems, MST was more effective than individual therapy (IT). Furthermore, 4-year follow-up data suggested MST was effective in reducing recidivism above those that received IT.

Timmons-Mitchell, Bender, Kishna, and Mitchell (2006) examined the effectiveness of MST in a real-world mental health setting with 93 juvenile justice involved youth and their families. Participants were randomly assigned to MST or treatment as usual (TAU) services. An 18-month follow-up posttreatment for offense data and 6-month follow-up posttreatment for ratings of the Child and Adolescent Functional Assessment Scale (CAFAS) were conducted. Findings revealed significant reductions in re-arrest rates and significant improvements in functioning at home, school, and in the community.

MST has also been used with *young persons* with psychopathic-like traits, a group of individuals on whom we focused in Chapter 8. MST is regarded as the best intervention with these individuals as it involves altering the problems directly affecting them, such as dysfunctional families, ineffective schools, and antisocial peers (Harris & Rice, 2006).

The effectiveness of a parent-training program on the trajectory of offending of 55 chronic juvenile offenders ( $M$  age = 14 years,  $M$  number of offense rates approximately = 8) compared with usual juvenile justice or court-appointed treatment was investigated by Bank et al. (1991). Twenty-eight families were assigned to the experimental group (parent training at the Oregon Social Learning Center), and 22 families were assigned to be community controls (court-appointed family therapy as an alternative to incarceration). During the first year of the program, therapy sessions were conducted independently with each family in the presence of their teenager, resulting in approximately 45 hours of professional contact (~23 hours of which were phone contact only). Because of additional stressors on these families (i.e., parent antisociality, parent mental illness, and marital discord), therapy was not time-limited and contact could be initiated with the study's therapists when required. As such, follow-up sessions were conducted with 12 of the 28 experimental families to

provide additional psychosocial support. (Details regarding treatment of community controls were unavailable.)

The findings from this research suggested that the experimental group experienced a reduction in serious crimes during the treatment year, whereas for the community control group a similar reduction was not as immediately forthcoming, occurring variably throughout the first year of 3 follow-up years (Bank et al., 1991). Moreover, these early reductions in offense rates persisted during follow-up for both groups. In addition, boys in the experimental group spent significantly less time in institutional settings than did boys in the control group. What the authors also highlighted was that, although parent training had a significant impact on the chronic offending patterns of these juveniles, there was a very high emotional cost to staff. Conversely, the alternative program was less high-maintenance from the staff perspective.

Quinn and van Dyke (2004) evaluated a multiple-family group-intervention (MFGI) for first-time juvenile offenders. Multiple-family group-interventions are reportedly similar to typical family interventions, except that MFGI has an additional unique dimension to its structure. That is, families are offered the opportunity to challenge, confront, support, and provide alternatives to one another. In the Quinn and van Dyke research, MFGI was compared with a convenience control sample of first-time juvenile offenders receiving usual court-appointed services. Recruitment was supported by two separate counties (i.e., districts), whereby one county's court officials (e.g., judges, probation officers) referred first-time juvenile offenders to receive MFGI (called Family Solutions Program; FSP), and the other county continued service as usual whereby the majority of first-time offenders were referred to probation. In total, 360 juveniles were referred to FSP (approximately 55% males, mean age of 13 years) and 95 to probation (64% male, mean age of 14 years). FSP consisted of ten 2-hour sessions outlined in a 197-page manual, each attended by an average of six families. FSP group leaders had a degree qualification in human services or a social-science discipline and were trained in the program. Topics covered in the 10 sessions included group cohesion, family cooperation, building home-school partnerships, parenting skills, family contracting, education, decision making, community volunteering, and conflict resolution. To graduate from the program required attendance in at least 9 of the 10 sessions. The young first-time offenders in the probation group received usual treatment of between 3 and 24 months of probation and the cost of supervision fees (e.g., 9-month supervision fees were \$560 payable by the family). In terms of attrition, of the 360 referred to FSP, 93 did not complete the program (27% never attended, 40% attended 1–3 sessions, and 37% attended 4–8 sessions), resulting in 267 "graduates."

Results showed that juvenile first-time offenders placed on probation were 9.3 times more likely to re-offend compared with the FSP graduates (Quinn & van Dyke, 2004). Moreover, the FSP graduates were the largest proportion of youths to not re-offend (80.1%) compared with probation (45.3%) and dropouts (63.4%). Compared with FSP graduates, the young offenders from the dropout



families were 4.4 times more likely to re-offend. Although Quinn and van Dyke concluded that a MFGI is effective in reducing recidivism, they cautioned that further research is required to identify variables that affect outcomes.

It appears, then, that family and parenting interventions for juvenile delinquents and their families are beneficial in reducing the length of institutionalization. There is, however, only limited evidence as shown earlier in this section that family and parenting interventions reduce the *risk* of juvenile delinquency or have a beneficial effect on parenting, parental mental health, family functioning, academic performance, future employment, or peer relations (Woolfenden, Williams, & Peat, 2001). It must be noted that studies to date have received extraordinary resources, which would typically not be available in many real-world settings, enabling them to provide intensive treatment and support to families. Furthermore, family interventions do not address the problems of single-parent families, foster families, homeless youths, and youths living with extended families. Indeed, large numbers of juvenile delinquents do not live with their birth family, have a history of child protection orders, and have poor familial relationships; in such cases, parents are unlikely to be available for intensive treatment programs. In attempts to overcome the limitations of family interventions with juvenile delinquents, researchers and practitioners have turned to school-based interventions. Schools are well situated to provide prevention and intervention services to large numbers of at-risk youths.

## School-Based Interventions

Children spend approximately 18% of their waking hours in school (Gottfredson, 2001), which highlights the importance of this setting to young persons during key developmental years. Moreover, schools consist of trained staff who are able to help students reach their maximum potential and who serve as a primary source of socialization, thereby providing an important foundation for future success or failure. Supportive school climates have been demonstrated to reduce multiple problem behaviors (Frey et al., 2005). Interventions for juvenile delinquents in school settings are, however, few, primarily due to high rates of dropout, suspension, and expulsion from school (Ellis & Sowers, 2001). This is somewhat antithetical given that educational contexts can target a number of school-related problems that are likely to contribute to the development of antisocial behaviors (e.g., poor grades, substance abuse, truancy, aggressive behaviors, delinquent peer associations, poorly managed school environments, poor home-school relationships, and negative teacher-student relationships; see Ellis & Sowers, 2001; McWhirter et al., 2007; Siegel et al., 2006). This is not to say, however, that school-based interventions have not been successfully implemented.

For example, Frey et al. (2005) examined the effects of a school-based social-emotional competence program (entitled *Second Step*), which addressed the relationship between social cognitions and prosocial and antisocial behaviors.

The program, which consisted of three units in empathy training, impulse control and problem solving, and anger management, was designed to reduce aggressive behavior and increase empathic, socially responsible behavior through the development of young persons' cognitive, emotional, and behavioral skills. The number of lessons varied from 18 to 27, depending on the grade level of the young persons participating. Frey et al. recruited 1253 children (age range 7–11 years) from 15 elementary schools from three cities in the United States. Two-thirds of the sample was randomly assigned to an intervention group and the remainder acted as a control group. Attrition rates in the intervention (25.5%) and control (28.8%) groups resulted in a final sample of 462 in the intervention group and 436 in the control group. Findings indicated significant group differences in student behavior, goals, and social reasoning, with the intervention group experiencing superior outcomes. With reference to attributions or behavioral intentions, no group differences were found. This was accredited to poor data collection methods. In conclusion, the authors viewed the outcomes of the program as positive for the prevention of future at-risk behavior patterns but acknowledged that programs such as this – which are solely school-based – have limitations in being transferred successfully outside of the school system (Frey et al., 2005).

Using a case management approach, the U.S. National Center on Addiction and Substance Abuse (CASA) developed the *CASASTART* program, a community-based, school-centered intervention for high-risk youth (Murray & Belenko, 2005). The program, which targets 8- to 13-year-old high-risk youths, their families, and communities, uses an intensive case management approach, with caseloads of 15 children and families per case manager. *CASASTART* consists of eight core service components including (1) social support; (2) family services; (3) educational services; (4) after-school and summer recreational activities; (5) mentoring; (6) incentives; (7) community policing; and (8) criminal/juvenile justice interventions (Murray & Belenko, 2005). The responsibility for integrating key stakeholders within communities (e.g., schools, law enforcement agencies, social services, and health agencies) rests with the case managers (for a full description, refer to Murray & Belenko, 2005). Between 1992 and 1996, an initial evaluation of the program conducted by Harrell, Cavanagh, and Sridharan (1998) found that young persons who had participated in *CASASTART* were significantly less likely to use marijuana and alcohol, engage in drug trafficking, engage in violent crime and associate with delinquent peers, and were significantly more likely to have positive peer relationships and be promoted to the next grade. (Since 2004, around 69 schools in the United States have implemented the *CASASTART* program, and there are additional sites in various stages of development.) Although the data provided to date are limited and neglect to offer evidence of staffing levels, specific program characteristics, training strategies of staff, and cost effectiveness, which serve to delineate the efficacy of this program, this intervention approach, which offers intensive psychosocial support across domains (e.g., school, family, community), may be effective in preventing juvenile delinquency.

## **Youth Justice Conferencing**

Youth justice conferencing is part of a general group of sanctions called restorative justice (Luke & Lind, 2002), which has been implemented and researched throughout the world. In Australia, youth justice conferencing is the most common form of restorative justice for deterring re-offending and is initiated through referrals by the police (Stewart & Smith, 2004). It is implemented as an alternative to detention in state correctional facilities. Conferencing brings together those affected by a criminal offense, usually the young offender(s), family, victims, and other supporters who discuss the offending and its impact. This process is undertaken to encourage acceptance of responsibility by the offender, to negotiate some form of restitution to the victim or community, and to help to reintegrate the offender back into his or her family and community (Luke & Lind, 2002; Stewart & Smith, 2004).

To date, however, research has predominately focused on participant feedback and implementation issues rather than on rates of re-offending (Luke & Lind, 2002). In an exception to this, Hayes and Daly (2004) assessed the impact of offender characteristics and conference features on the future offending behavior of two hundred 10- to 16-year-old individuals in Queensland, Australia. Findings revealed that in the 3 to 5 years after their conference, recidivism rates declined, with approximately half of the young offenders going on to commit only one offense. Furthermore, age of onset of offending (early-onset life-course persistent offending behaviors) and prior offending history (those with one or more prior offenses who went on to commit three to five more offenses) were identified as predictors of future offending behavior. No conference features were found to be predictive of future offending behavior.

In the only Australian randomized controlled trial of recidivism rates subsequent to youth justice conferencing, results were mixed depending on the type of offender (Sherman, Strang, & Woods, 2000). Between 1995 and 2000, 121 violent offenders (30 years old and under), 900 drink drivers, and 392 property offenders (18 years old and under) were randomly allocated to either conferencing or court. Results indicated no change in offending for property offenders, a 6% increase in offending for drink drivers, and a 38% decrease for violent offenders when compared with those assigned to court.

A recent Canadian meta-analysis of 22 studies that compared the effectiveness of restorative justice programs with other types of interventions for reducing recidivism also showed mixed results (Latimer, Dowden, & Muise, 2001). Overall, most of the programs reduced re-offending (by as much as 38%) but some led to increases in recidivism (by as much as 23%).

## **Cognitive-Behavioral Interventions**

Cognitive-behavior therapy (CBT) incorporates attention to cognitive and emotional processes that guide overt behaviors, and typically CBT programs incorporate behavior therapy, social learning theory, and cognitive theory to

inform practice (Hollin, 1990). Therapy techniques typically associated with CBT include structured learning experiences designed to influence cognitive processes such as interpreting social cues; monitoring one's own thought processes; identifying and compensating for distortions and errors in thinking; reasoning about right and wrong behavior; generating alternative solutions; and making decisions about appropriate behavior. Hollin (1990) referred to two types of cognitive-behavioral interventions with young offenders, namely individual programs and residential and community programs. Within individually focused interventions for young offenders, there are three broad types, namely, individual behavior therapy, social skills training, and cognitive-behavior modification (Hollin, 1990).

The efficacy of cognitive-behavioral programs with both juvenile and adult offenders has been highlighted quite extensively in the literature (Landenberger & Lipsey, 2005; Lipsey & Landenberger, 2005; Lipsey, Chapman, & Landenberger, 2001; Pearson, Lipton, Cleland, & Yee, 2002; Wilson, Bouffard, & MacKenzie, 2005), and a number of meta-analyses have been conducted identifying CBT as a highly effective intervention for reducing the recidivism of juvenile and adult offenders (Landenberger & Lipsey, 2005; Lipsey & Landenberger, 2005; Lipsey et al., 2001; Pearson et al., 2002; Wilson et al., 2005). For example, in a meta-analysis of 58 studies, Landenberger and Lipsey (2005) identified specific factors associated with effective CBT treatment in adult and juvenile offenders. Factors identified to be independently related to effect sizes (i.e., difference in recidivism rates between treated and untreated offenders) included high-quality implementation (represented by low attrition rates, close monitoring of treatment implementation, and adequate CBT training for the providers); inclusion of anger control and interpersonal problem solving components; and use with offenders with a higher risk of recidivism. Components found to diminish the effects of CBT were inclusion of victim impact and behavior modification components; no significant differences were evident in effect size between randomized and nonrandomized designs (Landenberger & Lipsey, 2005).

In the United States, Lipsey (1992) conducted a meta-analysis of 443 programs for juvenile offenders (both within and outside the juvenile justice system). The findings were unequivocal in that the most effective programs were behavioral and skills-focused, concrete, and focused on overt behaviors. According to Clark (2000) in his description of CBT approaches in the treatment of young offenders, those that keep the focus positive, remain behavioral and outcomes oriented, and are culturally sensitive are the most beneficial.

Rohde et al. (2004) evaluated a cognitive-behavioral intervention designed to enhance the coping and problem-solving skills of 76 male incarcerated youths in the United States. Individuals were randomly assigned to either the group CBT "coping" program ( $n = 46$ ) or usual care ( $n = 30$ ). The young persons involved in the coping course received 16 classroom-like mode treatment sessions comprising social skills, relaxation, cognitive restructuring, communication, and problem-solving training accompanied by handouts with key concepts and

homework assignments over an 8-week period. The control group received usual treatment, which typically consisted of drug/alcohol support groups, sex offender groups, and critical thinking skills training. On average, there were seven participants in each group, with a mean attendance rate of 13 out of 16 sessions. Findings revealed significant reductions in externalizing problems and suicide proneness, along with increased self-esteem and sharing of feelings with staff for the CBT coping group. Although this is encouraging, it was acknowledged that outcome measures composed solely adolescent self-report, and follow-up data regarding criminal recidivism, psychosocial functioning, and psychopathology were unavailable.

There appear to be few identifiable studies investigating CBT treatment via one-on-one methodology in the treatment of juvenile offenders. This is somewhat surprising given that Feindler and Ecton (1986) asserted that there is a real need for individual treatment approaches because adolescents may not have the necessary motivation, verbal skills, insight, or intellectual capabilities to benefit from group treatment. Furthermore, this can be further compounded due to adolescents' difficulty in communication, self-disclosure, and efforts to impress peers during group programs. Finally, Feindler, and Ecton (1986) highlighted practical issues that might also impede the efficacy of group programs, including, for example, recruitment of appropriate group members, scheduling sessions, transportation, group noncohesiveness, communication problems, and potential situations where intergroup conflict can occur.

One of the few individual-based CBT studies was by Kendall et al. (1990) who compared the effects of individual CBT with supportive/psychodynamic therapy for the treatment of conduct-disordered youths in a psychiatric day hospital. Twenty-nine individuals (26 male, 3 female; mean age = ~11 years) were randomly assigned to one of two treatment sequences: (1) CBT followed by supportive/psychodynamic therapy or (2) vice versa. Assessments were conducted before treatment, after first therapy segment, and after second therapy segment. Both interventions were conducted once or twice a week over 4 months and involved an average of twenty 50-minute individual sessions. With reference to the CBT program, this comprised self-coping statements, problem solving, modeling by therapists (e.g., rehearsal, shaping), response-cost contingencies, social and self-reward contingencies, and positive reinforcement. The supportive/psychodynamic therapy consisted of encouragement to discuss current problems and the use of games to promote interaction. The therapists provided rewards at their discretion. Findings revealed statistically significant treatment effects for CBT alone, more specifically, increases in self-control, appropriate and adaptive behavior, academic competence, and social acceptance by peers. In addition, there were significant reductions in emotionality and impulsivity.

A study investigating the utility of a 12-week classroom-style CBT program with 16 incarcerated juvenile offenders in the United Kingdom (Welfare & Mitchell, 2005) was not really supportive of the Kendall et al. (1990) outcomes. Welfare and Mitchell (2005) reported statistically insignificant pre-post

treatment outcomes; however, trends demonstrating improvements in locus of control and self-esteem and reductions in levels of hopelessness were evident.

## **Wilderness Programs for Youth at Risk**

Many wilderness-type programs provide social support, place an emphasis on the relationship between a troubled youngster and a caring adult, and help the former to identify with appropriate role models. Outdoor programs, often referred to as adventure therapy or wilderness programs, are thought to fulfill a valuable role in the prevention of juvenile offending and offender rehabilitation. Although thousands of these types of programs are in existence (and have become increasingly popular because of media exposure through TV reality shows such as *Brat Camp*), comprehensive empirical evidence pertaining to their effectiveness has yet to be systematically gathered. This is not to say that data do not exist. For example, in a review of the crime prevention effect of wilderness challenge programs with delinquent youths, Wilson and Lipsey (2000) found the recidivism rate was 8% lower for program participants (29%) than for control participants (37%). In particular, it was found that established programs were more effective, indicating the need for ongoing core funding to assist programs to be more effective. What tends to occur in these programs, however, is that an individual's progress is often measured by written emotional growth assignments, peer group trust and staff recommendations, creating fire, building shelters, cooking food, leading a hike, holding oneself accountable, and self-awareness (Conner, 2007).

Nevertheless, these outdoor programs are seen as ideal, as they provide opportunities to (i) meet with young persons at risk in environments they perceive to be comfortable; (ii) provide alternative risk-taking environments for young persons for who taking risks and a desire for physical activity are strong personal characteristics; (iii) allow young persons at risk to set psychological and social outcome-based goals that they can achieve; and (iv) build self-esteem and establish a self-identity. Moreover, according to advocates of these programs, allowing young persons at risk to connect with their community is critical to building resiliency and preventing delinquency, and outdoor programs facilitate this.

In the wilderness-type experience, young persons usually participate in an expedition (most often in or to isolated areas) over a continuous period of time (e.g., 2–45 days) and during this time complete various outdoor activities (camping, hiking, canoeing, caving, abseiling, night walking, building fires and camps) individually and in small groups. In addition to the physical activities, special informal techniques are employed. For example, informal gatherings are held at noon (“aftertalk”) and during the evenings around the camp fire (“pow wow”). Daily accomplishments, progress made for that day,

and “tomorrow’s plans” are often the focus of these discussion sessions. One other technique is the “huddle up,” which requires all members of a group to form a circle if any member becomes dissatisfied with his or her or anyone else’s efforts toward achieving a planned goal.

The common theme in the program is providing outdoor pursuits that are physically and psychologically challenging within the framework of safety and skills development; to provide meaningful challenges leading to increased satisfaction through goal attainment; and personal, social, and environmental awareness. Implicit is that interaction between collections of individuals and the natural environment will develop well-functioning groups (Ewert & Heywood, 1991; Hattie, Marsh, Neill, & Richards, 1997), which is seen as particularly desirable among young offenders, because earlier research has shown the effectiveness of groups on decision making (Kahneman, Slovic, & Tversky, 1982), intracommunication (Hirokawa, 1990), task accomplishment (Marby & Attridge, 1990), and transmission of social norms (Whittaker & Shelby, 1988).

The elements mentioned above were implicit in our own research programs (Houghton, Carroll, & Shier, 1996) conducted with 10 young male offenders (aged 13–17 years) with a range of criminal convictions, including breaking and entering, stealing, motor vehicle–related offenses, and common assault. These young persons participated in a wilderness-type program in a remote area of Western Australia. Program activities conducted by trained police officers comprised daytime and nighttime bush navigation, survival training (e.g., identifying edible bush plants and water sources, building a shelter), and informal talk sessions around the camp fire.

Interviews with the young offenders during the program demonstrated their goal orientation comprised freedom-type goals, physical goals, and career goals:

- *Go to the Eastern states. Get away from where I live.*
- *Be a runner. Be a football player. Get a job.*
- *Not get into trouble any more.*
- *Stay away from the law.*

The young offenders also associated a specific reputation to police officers:

- *Mean, nasty, dirt. They think they are always right, but they are not!*
- *They do not know how to talk to us. They treat us like nothing.*
- *They have a badge and gun and think they are tough.*

Those involved in car-related offenses stated that getting police to chase them was a goal, and the “chase” gave them a reputation among peers and feelings of power, which enhanced their image.

During the wilderness-type program, the initial *daytime* navigation through *very dense* undergrowth was seen as pointless by these young persons (“a walk through a forest”), and group coherence was nonexistent. Structured observations of each individual during this exercise revealed a mean level of attending

behavior of 62% (range 56% to 72%). As the camp progressed over 2 days, group cohesion began to develop, and when the daytime navigation exercise was repeated during the nighttime, mean attending behavior was 94% (range 91% to 100%). Indeed, it was this nighttime navigation (which initially brought howls of derision as individuals were woken from their sleep) that the young persons reported as the most challenging exercise and the one from which they gained most satisfaction. Moreover, the navigation was completed in a much quicker time than when undertaken in daylight, rules of safety and survival were adhered to, and individuals remained in one line and helped each other through some very dense undergrowth, which was wet and slippery underfoot. On returning to camp very wet and tired at 2 a.m., the consensus view was

- *We all did it. It was great. I couldn't see a thing out there but I kept going.*

The freedom, rehabilitation, power, and physical goals set by the young offenders participating in this program are to some extent congruent with the goals set by the people who organize wilderness-type programs; they are also attainable through wilderness-type programs. What was also evident from this program was that the challenging goals (nighttime navigation) led to greater performance because individuals are motivated to try harder to attain these goals (Locke & Latham, 1984, 1990). Furthermore, it has been shown that when individuals are committed to their goals, action does not stop until the goal is reached or reached to the maximum extent possible (Locke & Latham, 1984).

Wilderness-type programs have been explored as alternatives to facilitate and promote the development of appropriate social and adaptive behaviors, particularly with at-risk adolescents (Australian Institute of Criminology, 2003; Burdsal & Buel, 1980; Ewert, 1987; Robb & Ewert, 1987; Smith 1982; Wilson & Lipsey 2000; Wilson & MacKenzie, 2006). Indeed, some wilderness programs have gained recognition for their purported ability to rehabilitate some of the most difficult children that come into the juvenile justice system (Greenwood & Turner, 1987), particularly in relation to reducing helplessness, drug taking, and re-offending (Castellano & Soderstrom, 1992; O'Brien, 1990). Maintenance of behavior change may not be overly successful, however, in that 75% of the youths who successfully completed the O'Brien (1990) program were rearrested within 270 "at-risk" days, and a quarter of these youths were eventually incarcerated.

Wilderness therapy is seen as a broader field than are wilderness programs for at-risk youth. According to Conner (2007), the term *wilderness therapy* has two meanings: (i) introducing people to the wilderness "as the therapist" and (ii) professional therapy that takes place "in the wilderness." Wilderness therapy, in its purest form, is a positive growth experience (Conner, 2007) where teens face natural challenges and adversities designed to be therapeutic in nature. Viewed in its entirety, the purpose of the wilderness therapy is to separate young persons from negative influences by placing them in safe outdoor environments to help them discover what they have taken for granted. In doing so, circumstances are created that lead to self-examination, communication, and



cooperation, all of which contribute to the well-being of the group (Ewert & Heywood, 1991). An alternative explanation is that these programs unlearn the coping strategies that youth at risk have learned in order to survive in their environment (often emotional strategies) and then learn more collaborative and cognitive coping strategies to use when they encounter challenge and conflict situations (Hattie, Marsh, Neill, & Richards, 1997).

Empirical evaluations of wilderness therapy programs are limited. Aldana (2007) evaluated the effectiveness of the RedCliff Ascent Program using the Youth Outcome Questionnaire (Y-OQ), which measures psychosomatic, interpersonal, intrapersonal, and social problems, behavioral disorders, and behaviors that require immediate medical attention. After completion of the program, 53 of the 58 participants (91.4%) experienced significant clinical change, with 47% considered to be clinically recovered 6 months after the program (see Aldana, 2007).

In Australia between 2001 and 2003, the Systemic Wilderness Adventure Therapy Research and Development (SWATRAD) project was established to investigate the potential to intervene early and treat psychological, behavioral, and family-based problems in adolescents before they required referral to a clinical service (Crisp & Hinch, 2004). The model applies a social-emotional competency and coping skill framework to group-based adventure experiences run in a part-time, 10-week program format that involves a range of steps. In 2000 and 2001, with a total sample of 39 adolescent outpatients (ages 13–18 years,  $M$  age = 15 years 2 months), the program was found to be an effective clinical treatment for a range of severe mental health problems. Further, compared with best-known treatments of medication combined with conventional psychological therapies (e.g., CBT) for depression, this wilderness therapy program showed an equivalent benefit. Resilience factors such as self-esteem, social competence, school functioning, and family functioning also demonstrated clear and sustained improvements, thereby mitigating future risk.

## **Wilderness Boot Camps**

Another type of program, which according to its advocates is conducive to positive growth and change in young offenders and those at risk of offending, is boot camps. Originally created as an alternative to incarceration, the origins of boot camp programs can be traced to the juvenile justice system. Historically, young offenders participated in an army-like training program in training facilities and buildings similar to military training compounds. Privatization of the boot camp model resulted, however, in a switch to outdoor settings where costs were reduced and the positive elements of wilderness therapy were incorporated, hence, the term *wilderness boot camps*. However, the wilderness boot camp appears to have little in common with a wilderness therapy program, and

some argue that they are separate and incompatible treatment models (AIC, 2006). Indeed, designed to rapidly gain control and compliance and obedience to authority, boot camps subject young persons to emotional and psychological trauma along with physical adversity in order to strengthen resolve under pressure and break opposition and defiance. To attain this deprivation, work chores, loss of privileges, isolation, extreme exercise, verbal abuse, intimidation, threats, and corporal punishment are all administered.

These camps are said to create a type of stress that leads youth at risk to reevaluate their lives and make positive changes and to increase social bonding, which according to the research literature is associated with declines in criminal activities (AIC, 2006). Critics of boot camps argue, among other things however, that

- the confrontational nature of the interactions between the juveniles and staff leads to more adjustment difficulties;
- girls in boot camps who have a past history of family violence and both boys and girls with a history of abuse find the experience particularly stressful and counter-therapeutic;
- the demanding nature of the boot camp is beyond the coping ability of young persons at risk; and
- the stress in boot camps is so severe it is dysfunctional (MacKenzie, Wilson, Armstrong, & Gover, 2001).

These are serious concerns. Nevertheless, it could still be asked whether boot camps are effective in bringing about desired changes in the behaviors of young offenders and those at risk of offending. The answer appears to be no. A systematic review of boot camps conducted by Wilson and MacKenzie (2006) reported that the military-type physical activity aspects of these programs had no overall positive effect on rates of recidivism. In conclusion, the authors recommended that boot camps might be more effective if the primary emphasis was on the therapeutic rather than militaristic and physical. This is supported by the Australian Institute of Criminology (2003) and Wilson and Lipsey (2000) who also emphasized the therapeutic elements of such programs as crucial to success. These latter authors also found a positive crime prevention effect of wilderness challenge programs, in that recidivism rates among young offenders were 8% lower for wilderness program participants (29%) compared with that of control subjects (37%).

MacKenzie et al. (2001), in the largest published study to date, surveyed 2688 juveniles from all 26 boot camps in the United States and 1848 from 22 traditional juvenile facilities ( $N = 4516$ ) on entry and exit from their sentencing facilities. Those young persons who experienced boot camps perceived them more favorably, safer, therapeutic and helpful, and less hostile compared with the perception of those who experienced traditional facilities. Furthermore, there were no differences in the levels of anxiety and depression of young persons in boot camps and their counterparts in the traditional facilities. Although attitudes to antisocial behavior generally changed positively, this

was not the case for those with a history of abuse and family violence. With reference to future offending behavior, the boot camps had very limited impact.

In summary, it appears that for successful program outcomes, there should be thorough assessments and ongoing monitoring of young persons participating; a risk-management assessment of activities and screening of program staff; and multimodal treatments with a cognitive-behavioral orientation addressing specific criminogenic needs (e.g., attitudes supporting offending, peer groups, family problems, drug and alcohol use, anger and violence problems) (Lipsey & Wilson, 1998; Singh & White, 2000). Programs should also ensure meaningful and substantial contact between participants and treatment personnel, inclusion of an aftercare component (AIC, 2003), and where Indigenous or culturally and linguistically diverse youth at risk are involved, should engage significant others, be culturally appropriate, and have staff who can relate to the clients (Singh & White, 2000).

### **Interactive Multimedia–Based Programs**

Walters, Miller, and Chiauuzzi (2005) highlighted the increasing interest in the use of multimedia technology because of its cost-effectiveness in providing more personalized and effective messages, and because it tends to include motivational, attitudinal, and skills-training components, which have better empirical support than do educational approaches (Larimer & Cronce, 2002; Walters & Bennett, 2000). Other advantages of multimedia-based programs are that they (i) can offer assessment and screening; (ii) allow students to determine their own need for more formal interventions; (iii) make suggestions about what resources a young person might find helpful; (iv) may increase honest responses due to their nonjudgmental quality of format; (v) increase disclosure in areas such as at risk behaviors; (vi) enable users to control their learning environment, move at their own pace, and receive information on demand; and (vii) can tailor information, thereby providing a unique experience to users. Atkinson and Gold (2002) added that multimedia-based interventions appear to be more engaging and effective than is static text. It is also possible that computer interventions might be more effective than face-to-face interactions for some types of young people because they can receive information without feeling that they have to strongly defend an opinion in front of their peers (O’Leary et al., 2002; Walters, Ogle, & Martin, 2002). This assumes particular importance in the light of our *Reputation-Enhancing Goals Model*. As we have emphasized throughout our book, young persons at risk choose a particular (delinquent) self-image they wish to promote before an audience of their peers, and this audience then provides feedback so that the individual develops and maintains this social identity within a community. Without the social backdrop of a peer group, a delinquent reputation is hard to sustain (Reicher & Emler, 1986). Perhaps multimedia-based interventions, which remove the immediate presence

of an audience, offer a potential for turning around the lives of young persons at risk oscillating the trajectory to deviancy?

There is some research evidence from young persons involved in risky health-related behaviors (Kypri et al., 2004; Neighbors, Larimer, & Lewis, 2004; Walters & Neighbors, 2005) that suggests this might be the case. Moreover, efforts to address adolescent substance use have been attempted through the development of a variety of multimedia-based approaches including Internet-based health-promotion programs using interactive games and self-assessment procedures (e.g., Skinner et al., 2003; TeenNet, Centre for Health Promotion University of Toronto, n.d.), Web sites providing information on adolescent health (e.g., Go Ask Alice, Columbia University, n.d.; Facts on Tap, Phoenix House, n.d.), and interactive CD-ROM technology featuring games, videos of at-risk scenarios, and information about at-risk behaviors (e.g., Alcohol 101; Reis, Riley, Lokman, & Baer, 2000). A feature lacking in all of these kinds of programs, however, appears to be empirical evaluations of their effectiveness. For example, of those cited above, Alcohol 101 seems to be the only one providing some statistical evidence showing that students receiving the program reported gaining significantly more knowledge about risky sexual practices related to alcohol use and alcohol-related violence and professing a greater intent to use strategies to remain safe at parties. However, no behavioral outcomes were reported.

Bosworth, Espelage, DuBay, Daytner, and Karageorge (2000) concluded from a preliminary evaluation of a multimedia violence prevention program for adolescents that multimedia might be useful in changing the violent behavior of adolescents. In their study, the impact of a computer-based intervention program (SMART Talk) containing a number of theoretically driven anger-management and conflict-resolution modules was evaluated with 558 middle school students randomly assigned to either intervention or control group. Multivariate analyses of variance revealed that the intervention was successful in diminishing students' beliefs supportive of violence and in increasing their intentions to use nonviolent strategies.

In this book, we have placed great emphasis on young people at risk making deliberate choices to indulge in risk taking and delinquent activities in order to initiate, establish, and maintain a social identity that gives them membership to a desired peer group. We have just highlighted the potential of multimedia-based interventions for turning around the lives of these young individuals and then described a number of these intervention programs above. All, however, appear to be primarily concerned with providing young persons with a knowledge base rather than presenting them with a range of day-to-day choices and feedback on their choices that enables them to evaluate the decisions they make and the impact that these decisions may have on their desired reputations. We now describe a program based on 15 years of research into young persons at risk, the major tenets of which have formed the thrust of this book.

*Mindfields: A Self-Regulatory Intervention to Empower Young People at Risk to Change Their Lives.* The Mindfields program is founded on a social cognitive

perspective of self-regulation and is based on an empirical and theoretical understanding of at-risk youth with treatment components focused on cognitive-behavioral principles, which have been suggested as the gold standard for the treatment of juvenile offenders (Landenberger & Lipsey, 2005; Lipsey & Landenberger, 2005; Lipsey et al., 2001; Pearson et al., 2002; Wilson et al., 2005). Rather than simply a cognitive-behavior therapy program, however, Mindfields is a model of change such that it involves the development of self-regulatory life skills that will assist individuals to desist from a life of crime and prevent future offending behaviors. In earlier research (Carroll et al., 1997, 2006; Carroll, Hattie, et al., 2001; Carroll, Houghton, et al., 2001), it became evident that although young people state they want to change current antisocial activities, they lack the necessary skills to make these positive changes to their lives. Mindfields provides a set of tools, plans, and structures for young persons to build a new set of life skills and self-regulatory strategies. Furthermore, Mindfields presents a coherent framework for treatment commencing with a thorough screening process (The Mindfields Interactive Screening Tool; MIST) followed by a six-session intensive program that ultimately teaches young people a number of self-regulation strategies with supported guidance and positive reinforcement.

Kurtz (2002) highlighted that interventions that are cognitive-behavioral and are explicitly based on causal models of delinquency with a particular focus on factors associated with offending are more effective than those that do not. As commented earlier, Gendreau (1996) outlined characteristics associated with programs that successfully reduce recidivism. Mindfields incorporates all of these characteristics. For example, it has been designed to be an intensive and brief program, comprising six sessions over a 6- to 10-week period, consistent with Gendreau's suggestion that programs are intensive and usually between a few months' duration. Mindfields incorporates cognitive-behavioral techniques and is founded on social learning conceptualizations of delinquency, with a strong emphasis on learning adaptive self-regulatory skills. Participants are reinforced for their efforts through facilitator feedback and receipt of certificates of completion at the end of each session, with a group celebration at the end of the program attended by other graduates of the program, their families, friends, and support workers.

Facilitators are important in Mindfields, and as such all attend a 3-day training workshop to become accredited in the delivery of the program. Facilitators are also trained in cultural sensitivity through attendance at a cultural awareness workshop. The structure and activities of the Mindfields program were developed to ensure transferability to participants' real-world settings, and through the use of a support person, young people completing the program have a prosocial link back to their communities. Relapse prevention strategies are discussed in the final session, with emphasis on practicing the newly learned self-regulatory skills and acknowledging that reentering the program at any stage is possible if required. Systematic and thorough evaluation practices have been adopted. The MIST is an interactive computerized face-valid self-report

assessment tool of self-regulatory strategies used for determining baseline functioning of participants and treatment evaluation of the Mindfields program.

The MIST comprises 11 reliable measures of self-regulatory processes incorporating tasks of forethought (goal setting, assertiveness, and social competence), performance control (impulsivity, delay of gratification, time perception, reaction time, social problem solving), and self-reflection (self-regulation, life satisfaction). Specifically, *Hang Out* is an interactive video role-play game to measure forethought and decision making (participants view nine hypothetical problem scenarios based on a range of risky behaviors, e.g., getting in a stolen car for a joy ride; underage drinking). Using voiceovers, participants choose assertive, aggressive, or passive responses. *Goal Setting* (Carroll et al., 1997) and social competence using the *Adolescent Problem Inventory – Modified* (Kuperminc, Allen, & Arthur, 1996) are also included as measures of forethought.

Measures on performance control include *The Eysenck Impulsiveness Questionnaire (Adapted)* (Eysenck & Eysenck, 1978), a computerized *Delay of Gratification* task (Mischel, 1974; Wulfert, Block, Ana, Rodriguez, & Colman, 2002), a *Computerized Time Perception* task (White et al., 1994), and a computerized *Test Your Reflexes* task (Logan & Cowan, 1984). *Social Problem Solving Inventory-Revised Short Form* (SPSI-R Short Form; D’Zurilla, Nezu, & Maydeu-Olivares, 2002), a 25-item self-report questionnaire, measures positive problem orientation and rational problem solving and negative problem orientation, impulsivity/carelessness style, and avoidance style.

Finally, measures on the self-reflection component of self-regulation comprise two scales: the *Short-Form Self-Regulation Questionnaire* (SSRQ; Carey, Neal, & Collins, 2004) and the *Life Satisfaction Scale for Problem Youth* (LSSPY; Donohue et al., 2003). In addition to the measures on the screening tool, participants complete the *Modified-Adapted Self-Report Delinquency Scale* (Carroll et al., 1996) and the *Changing My Life Scale* (CMLS; Carroll, Ashman, Bower, & Hemingway, 2005), a 28-item readiness to change questionnaire.

Figure 9.1 shows an example of the interactive format and presentation style used for the instrumentation. As can be seen in Fig. 9.1, the MIST has been developed in the style of an interactive computerized comic book and uses graphics, voiceovers, and video-enacted scenarios to enhance engagement, address literacy levels, and overcome the difficulties associated with more traditional forms of paper and pencil tests. All data generated by measures on the MIST are automatically recorded into an Extensible Markup Language (XML) text file and saved onto the hard drive of the computer being used. These XML files are then converted into SPSS (Statistical Package for the Social Sciences) data files and merged into one data collaborative data file. The MIST engages participants easily, requiring limited persuasion to complete, and is brief. The language and presentation of item responses have been adjusted (e.g., cartoon characters displaying item responses in addition to written descriptions) to ensure that the literacy levels of the MIST are appropriate for the participants. The MIST was developed in line with key constructs of interest, namely self-regulation, Indigenous adolescents, delinquent



**Fig. 9.1** Short-Form Self-Regulation Questionnaire (SSRQ) and Life Satisfaction Scale for Problem Youth (LSSPY) item examples. (Reproduced with permission from The University of Queensland.)

populations, and accessibility to numerous people. The theoretical and empirical basis for the MIST has been well established and was developed specifically for juvenile delinquent populations in Australia.

An empirical evaluation of the Mindfields program was conducted (Carroll, Hemingway, Bower, & Ashman, 2008) with 57 adolescents aged 12–18 years ( $M$  age = 15.26 years,  $SD = 1.51$ ), of who 73.7% were males ( $M$  age = 15.24 years,  $SD = 1.51$ ) and 14% were females ( $M$  age = 15.17 years,  $SD = 1.47$ ) (with 12.3% unreported). These individuals were recruited from one youth detention center, various Department of Communities youth justice service centers, a number of alternative education schools, and several flexible learning network centers throughout Brisbane, Australia.

Preintervention and postintervention comparisons revealed that the incarcerated young offenders achieved significant reductions in impulsivity ( $p < .05$ ), negative problem orientation ( $p < .05$ ), and avoidance style ( $p < .05$ ) compared with control participants. Significant improvements were also evident in assertiveness ( $p < .01$ ) and rational problem solving ( $p < .01$ ). Inspection of mean scores revealed reductions in levels of self-reported delinquency and improvements in social competency, delay of gratification, and problem-solving style. Control participants remained stable.

It appears that there are no other programs directly comparable with Mindfields in terms of its settings, target group, or methodology. However, a large amount of evidence exists from research in related areas to suggest that the kind of techniques employed in the Mindfields program hold promise. For example, a review of interventions designed to reduce adolescent offending behaviors (Kurtz, 2002) identified that interventions explicitly based on a causal model (e.g., self-regulation) and that address a range of possible causal factors (e.g., deficits in impulse control, poor social problem solving, faulty thinking styles) are more successful than those that do not, with interventions derived from cognitive-behavioral principles producing positive changes in attitudes toward school and beliefs about aggression and solutions to conflict (Kurtz, 2002). Furthermore, a recent meta-analysis examining the effects of CBT on rates of

recidivism among juvenile offenders reported that the strongest relationships appeared for individualized treatment, followed by anger control and cognitive restructuring components of CBT, which are all substantial elements of the Mindfields program (Landenberger & Lipsey, 2005).

According to Landenberger and Lipsey (2005), high-quality implementation, close monitoring of the quality and fidelity of the treatment implementation, and adequate CBT training for the providers are the most robust characteristics of effective CBT programs. The Mindfields program incorporates a detailed manual that outlines treatment components and provides essential background knowledge about the program's development, a number of effective treatment integrity assessments, and a 3-day intensive training workshop for facilitators. Given these factors, in addition to effective treatment elements, it appears Mindfields is a highly robust and effective program for at-risk youth. Incorporating interactive multimedia components into interventions for at-risk youth appears to be an effective and motivational means to enhance self-regulatory life skills, to create positive behavior change, and to empower young people to change their lives.

## **Concluding Comments**

According to Gendreau (1996), the characteristics associated with offender rehabilitation programs that successfully reduce recidivism are those that are intensive and of short duration; cognitive-behavioral in orientation and based on social learning principles; helpful in developing new prosocial skills; incorporate positive reinforcement for participation; involve interpersonally sensitive and constructive therapists; and reconnect offenders with their prosocial world.

With reference to young persons with conduct problems and Conduct Disorder, Frick (2001) reviewed published studies that focused on psychosocial treatments and that reported treatment outcomes. From the review, the most effective treatments were (i) contingency management programs (CMPs), which establish clear behavioral goals, develop a system to monitor this, include reinforcement for reaching goals, and provide consequences for inappropriate behavior; (ii) parent management training (PMT), which teaches parents how to develop and implement very structured CMPs (it was noted, however, that large numbers of parents do not complete PMT); and (iii) cognitive-behavioral skills training to overcome the deficits in social cognition and social problem solving.

Frick (2001) added, however, that the vast majority of programs are largely ineffective because they are not based on knowledge but on broad theories or political "get tough" pressures. Furthermore, most are not developmentally informed and ignore powerful influences of psychosocial context (e.g., peers). Indeed, it was noted that some interventions actually increase levels of anti-social behavior and risk for negative life outcomes.



In summary, it appears that family-based programs are relatively ineffective for young people disengaged from their birth families or who have families with limited personal resources (i.e., motivation) to participate. School-based interventions fail to take into consideration the plethora of young people who are suspended, excluded, or who have abandoned school, and group-based programs for juvenile delinquents are confounded by negative peer relationships, such that individuation away from an antisocial peer norm is difficult. Finally, cognitive-behavioral programs have been shown to effectively treat juvenile offenders, with a one-on-one treatment approach being most useful.

Research presented in this chapter suggests that interactive multimedia-based programs offer opportunities for bringing about changes in the lives of young people who indulge in risky behaviors, particularly for the purposes of pursuing a specific social identity. We have proposed that interactive multimedia-based programs such as Mindfields, which encourages young people to focus on their day-to-day choices and provides feedback on these choices and the impact that the decisions in making these choices have on their social identities, *may* have the potential to help young people to develop self-regulatory life skills. This is irrespective of whether they are driven by peers or by a combination of psychopathology and facets of antisocial lifestyle. This proposal, however, remains to be confirmed by further rigorous evaluations in the field.

## **Chapter 10**

# **Developmental Trajectories of Deviancy: Looking Back, Moving Forward**

The focus of this book has been on youth at risk and the trajectories they pursue to delinquent and deviant behavior. It is now clear that for some young people, involvement in delinquent activities is initiated early in life as a consequence of neuropathologic impairments sustained during prenatal, perinatal, and/or early postnatal phases, sometimes in combination with family and neighborhood adversity. For others, involvement in delinquent activities is a deliberate choice on their part during the early and mid-adolescent years. In Chapter 8, we also highlighted a further group of young people whose delinquent and socially deviant activities is a consequence of specific affective and interpersonal behaviors that are often beyond their control. In this final chapter, we summarize our research findings that have been presented in each chapter of this book and then offer what we believe are the research steps necessary for furthering our understanding of the reputations of adolescents at risk and their trajectories to deviancy.

### **Initiating and Establishing Reputations**

As detailed in Chapter 2, the integrated Reputation-Enhancing Goals Model has been applied to at-risk and not-at-risk primary and high school students and to incarcerated adolescents in a variety of contexts, including schools (Carroll, Baglioni, et al., 1999; Carroll et al., 2000; Houghton & Carroll, 1996), clinics and detention centers (Carroll, 1995; Carroll et al., 1997; Carroll, Houghton et al., 1999), and adventure and wilderness-type programs (Crane, Hattie, & Houghton, 1997; Houghton, Carroll, & Shier, 1996). Adolescents operate within these contexts, which provide important processes for identity formation, decisions about educational opportunities, the consolidation of developing social values, and the construction of plans for one's future. Thus, for these adolescents, they may be a potential source for developing their public delinquent reputations of choice (see Houghton & Carroll, 1996; Martin, 1997). For example, if because of lack of commitment to and poor performance toward their academic goals, adolescents are labeled as failures in school, they

may indeed perceive themselves as failures. With little reason to maintain or desire a conforming reputation, they may subsequently search for success elsewhere. This success is likely to be in the form of a delinquent, nonconforming reputation (a competing reputation), which is admired by like-minded others, and which is developed and subsequently continues to be cultivated through the committing of highly visible actions, including breaking rules and being reprimanded by authority figures. Delinquency in this instance is a relatively common alternative for adolescents. Critically though, schools provide the social settings and opportunities for the achievement of nonconforming goals and for publicity and promotion of nonconforming reputations to occur (Houghton & Carroll, 1996).

In terms of practice, the integrated model has far-reaching implications. It would seem that school principals and teachers respectively need to examine their current whole school and individual classroom management programs, for it appears that these very programs, which are primarily designed to manage nonconforming individuals, may in fact provide the opportunities for them to gain recognition and notoriety for misbehavior. Classrooms and schools are highly public places with captive audiences, the very ingredients for initiating and establishing a nonconforming reputation. Thus, educational institutions can be seen to encourage, enhance, and maintain nonconforming reputations rather than correcting many of the problem behaviors with which they are confronted. Public displays (i.e., in front of a peer audience) of disruptive behavior by children and adolescents, particularly it seems in the classroom, may ultimately assist them to achieve their goal of gaining a desired (delinquent) reputation of choice.

For those young persons who make the choice to be delinquent, the process of public engagement in nonconforming activities becomes critically important. Our research shows that involvement in these types of activities in the presence of an audience creates and subsequently maintains the nonconforming social image that is so actively sought. This is not, however, an instantaneous occurrence. As we demonstrated in Chapter 4, the initiation of a specific desired reputation begins much earlier than adolescence, that is, in primary school. Furthermore, our research shows that different individuals are concerned about initiating different kinds of reputations and that in most instances the peer group is a necessary audience for this process. Thus, reputation is dynamic and developmental and begins to be cultivated in the primary school context.

### ***Where to from here?***

As suggested in Chapter 4, research attention should be focused on the goals that children set (especially during the early years of adolescence) and the importance they attach to them in their pursuit of different reputations. Such research may provide important information about how individuals progress along the developmental at-risk trajectory during these early formative primary school years.

Comparing how the reputational orientations of young children change over the mid to late primary and early high school years may also shed additional light on the early-onset versus late-onset offender trajectory. This is particularly important given that negative and nonconforming reputations become increasingly difficult to change with the onset of adolescence and the increasing importance young persons attach to peer groups. The implications of these suggestions for further research with early and mid to late primary school-aged children should not be underestimated given that “reputation may be a contributing factor to the maintenance of status even at preschool age, thus having important implications for the timing and content of any intervention efforts aimed at improving children’s social status” (Walker & Irving, 1998, p. 7).

### **Attaining and Maintaining a Social Identity of Choice**

Having discussed in Chapter 4 how social reputations are initiated in the primary school years, we turned our attention in Chapter 5 to how early adolescents to mid-adolescents transit the trajectory toward delinquent status. Drawing on our integrated Reputation-Enhancing Goals Model, we demonstrated that many of these individuals deliberately choose to be involved in delinquent activities in order to attain and then subsequently maintain a particular social identity. Purposefully organizing their delinquent behavior through highly visible actions enables these young people to communicate their intent to peers who provided feedback, which in turn further influences and reinforces the individual in his or her choice of social identity.

We also demonstrated that the behavior-management strategies used in whole school contexts and by teachers in classrooms actually provide opportunities for young persons (and particularly those at risk) to display their actions in highly visible ways. The management strategies adopted by schools and teachers are almost always hierarchically ordered in line with the increasing severity of the deviant behavior displayed. As the severity of a young person’s behavior increases, so too does the severity of the behavior-management sanction applied. Interestingly, our research showed that as this escalation occurs, so too does the visibility of the young person’s inappropriate actions and interactions with authority figures. Moreover, the young people in our research openly told us that generating conflict is their goal, as the associated increasing public visibility actually assists them to progress along the at-risk trajectory and toward greater nonconforming status among their peers. This enables many of these young persons to further establish and enhance their earlier initiated social identity of choice. Thus, it would appear that many of the behavior-management strategies that educational institutions and teachers initiate, particularly for managing the deviant behavior of young people at risk, are antithetical to the institutions’ overt purposes.

There are, then, important implications for educators and other professionals working with children (and adolescents), particularly those children who from an early age initiate actions toward the development of a non-conforming reputation; these young persons are often at risk of dropping out of school before the completion of the compulsory years of schooling. First, that reputation makes an important contribution to the maintenance of status, even for very young children, must be acknowledged. The timing and content of any intervention efforts aimed at improving children's social status must then be carefully assessed. Obviously, attempts to intervene in the lives of young persons at risk should be in the primary school years. Furthermore, the development of effective interventions that address the social-psychological needs of these students should be more of a focus. For example, goal-setting programs can be effective with at-risk students when the goals are challenging and specific, when feedback is linked to the successful performance of the goals, and when rewards are selected by the students themselves.

### *Where to from here?*

The transition from initiation of a reputation to its maintenance is a critical point in the developmental pathway for young people at risk because their commitment to a deviant lifestyle is being cemented into their desired social image of choice. Because most early adolescents are in the initial stages of adolescent development, the choice of a conforming or nonconforming reputation assumes increasing importance. Therefore, research should be particularly focused on why early adolescents admire socially deviant activities and perceive themselves to be tough, leaders, popular, and nonconforming (e.g., troublemakers) more so than do mid to late high school adolescents.

Although our research and that of others has established that differences exist in the goal orientations of at-risk and not-at-risk primary school-aged children and that these differences appear to be related to Academic Image and Social Image, future research should investigate whether the goal content (as well as goal importance) of young children differ because of the pursuit of different reputations. Is it that primary school males set goals for the purpose of belonging to a particular subgroup and are females different to males in regard to this? Moreover, are these goals linked to enhancing or maintaining a particular type of reputation within the subgroup? The issue of how individuals progress from not-at-risk to at-risk status, particularly at an early age, also warrants further investigation if prevention and intervention programs are to be more effective in accounting for the goal-directed behavior of at-risk children.

With increasing age, young persons at risk continue in pursuit and maintenance of nonconformity and their social identity of choice. The importance of longitudinal research, which documents and compares changes in reputational profiles of at-risk male and female students on their chosen trajectory to delinquent status during the junior high school years, cannot therefore be

underestimated. We would also suggest (as outlined in Chapter 5) that including larger proportions of minority groups would permit a more extensive examination of the possibility that reputational aspirations and delinquency goals *do* interact with ethnicity and/or general social status within the broader community.

Whether the goal-directed activities and energies exerted by young persons at-risk through delinquent activities can be rechanneled into equally adrenaline-filled yet less costly burdens on society remains an important challenge for service providers and applied researchers. Identifying critical times in the development of a young person's delinquent social identity and the impact that ethnicity and/or social status has on this may provide key points for intervention.

The findings also suggest the need for research that develops and evaluates the effectiveness of behavior-management systems that reduce the visibility of teacher and whole school responses to nonconforming behavior in preventing the development of delinquent reputations. In addition, schools might consider employing behavior-management methods that teach at-risk adolescents *how* to attain reputations that are conforming rather than nonconforming, which are achieved through participation in more prosocial activities yet still result in enhanced status among peers. However, researchers must also examine (i) how to identify positive peer arenas and ways of promoting involvement and achievement in these arenas through prosocial activities (as opposed to delinquent activities); (ii) whether these arenas and their associated peer networks are differentiated within and outside the school; and (iii) to whom any information about involvement and achievement should be communicated.

## **Risk Taking and Social Identity of Choice**

In Chapter 6, we discussed how once adolescents had made a choice and started their transition on the trajectory toward establishing a delinquent reputation, they indulged in a range of risk-taking behaviors to maintain this reputation. In this context, risk taking is functional and goal-directed and plays an important part in their development (Pat-Horenczyk et al., 2007), especially in terms of identity formation. To some extent, this might be viewed in a similar light to Moffitt's (1993) "maturity gap" hypothesis, which asserts that adolescents become involved in adult behaviors that symbolize independence and autonomy, such as drinking, sexual activity, and drug use, but that society often denies them.

We presented comprehensive evidence to show that the types of behavior in which adolescents at risk participated (drug use, alcohol use, volatile inhalant use, and body-modification practices such as tattooing and piercing) were peer networked and highly visible in nature. As a consequence, we highlighted that

involvement in these risk-taking behaviors not only maintained but accelerated the adolescent's choice of reputation into a nonconforming social identity. An individual's involvement in these activities, along with his or her degree of involvement, was evident to others both within and outside of the peer group. As Hopkins and Emler (1990) demonstrated, adolescents do not do things when they believe it will have no repercussions for their reputations but because they hope it will. For example, adolescent substance users and volatile inhalant users wanted similar nonconforming reputations and indulged in highly visible behaviors so that others saw them in this way (Chapter 6). However, it was *within* the volatile inhalant use (VIU) group where beneficial repercussions were most clearly demonstrated. That is, although the social dynamics of VIU were characterized by companionship and peer acceptance, reputational status was most esteemed and was assigned according to severity of use.

In our research into reputation and alcohol use, children and adolescents with the greatest orientations toward alcohol saw themselves as nonconforming yet ideally wished to be perceived by others as conforming (Chapter 6). As we pointed out in Chapter 6, societal mores view alcohol use by young persons as inappropriate and the practice is therefore perceived as nonconforming by adolescents. On the other hand, it also appears to be interpreted by young persons as a means of gaining entrance to, and subsequently receiving approval from and acceptance by, the adolescent peer group and is therefore a conforming activity.

In our research into reputation and body marking (Chapter 6), we found that the majority of young people regarded tattooed individuals unfavorably. Nevertheless, for reasons other than as a part of cultural expression, many young persons are obtaining tattoos even though they are aware that they will be perceived as associated with challenging, tough, or illegal/criminal behavior. Moreover, as we showed in our research, tattoos are an outward appearance stereotypically associated with delinquency, which helps to cultivate a delinquent reputation.

It seems then that young persons at risk make choices about the way they present themselves to others and then indulge in behaviors to attain their reputation of choice, which is congruent with the peer group from whom they are seeking acceptance. Furthermore, continued involvement in these behaviors not only maintains social identity but also enhances the standing of some individuals whose level of involvement is greater than that of others within the group.

### ***Where to from here?***

It has been argued that individual identities develop among a complex of social pressures to both conform and act out against prevailing norms. Adolescents decide how they wish to present themselves to others and count the costs of this by gauging the reactions they get (Emler, 1984). Our research has clearly demonstrated that the socially attractive aspects of group membership are

assigned greater importance than are any possible negative or detrimental outcomes. For example, children as young as 5 were able to identify adolescents presenting with nonconforming behaviors yet expressed a clear positive orientation toward membership of this group of individuals. Similarly, membership with group-based volatile inhalant users was seen positively in terms of companionship, peer networks, acceptance, and as a mechanism for sustaining a nonconforming type of reputation.

Researchers therefore need to examine identity and image development within these groups and determine how decisions are made. Are they democratic or derived according to the hierarchical status accorded to particular individuals based on the frequency and severity of their indulgence in these behaviors? Our research suggests the latter. According to Williams et al. (2007), treatment strategies are still under development particularly for the treatment of longer-term inhalant users. Given the status bestowed on these long-term users and the influence they may exert over other group members, further research is critical if prevention and intervention programs currently based on role modeling and identity are to be effective.

Nowhere are the adverse social (being criminal, having lower status types of employment, or engaging in illicit activities) and serious health risks (such as infection, viral transmission, and tissue damage) more evident than in body-modification practices. According to Deschesnes et al. (2006), in order to become an accepted member of the group, adolescents may be tempted to model the behavior of peers whom they perceive as cool, even though these behaviors are high-risk activities. Adolescent females in particular profess a favorable attitude toward tattoos, suggesting that they might create better acceptance among peers, even though they are aware that tattoos help to cultivate a particular undesirable social image. That many adolescents (males and females) develop an interest in tattoos highlights a pressing need for research into the peer relations and social-cognitive processes associated with their decisions. In some countries such as New Zealand, tattooing is cultural, esteemed, prevalent, not antisocial, and not associated with the risks we identified in our research. In some other countries, however, presence of tattoos and body piercing are seen as symbols of antinormality and are linked with risk-taking behaviors (e.g., drug use, sexual activity, eating disorders, and suicide: see Carroll et al., 2006). Research should therefore examine the social motivations of young persons for obtaining tattoos and piercings within these different cultural contexts to further our understanding of their links with conformity and/or nonconformity.

Longitudinal research is also necessary to determine the decision-making processes of children and adolescents in terms of acceptance by peers over and above possible adverse social and health outcomes associated with involvement in risk-taking behaviors. This might provide a more focused direction in the development of treatment programs so that they have increased salience and efficacy at critical times of involvement in these activities.



## Early-Onset Life-Course Persistent and Late-Onset Adolescent-Limited Offenders

Initiating and sustaining a deviant social image is congruent with what Moffitt (1996) terms the late-onset adolescent-limited (AL) offender. This is the young person who gravitates to delinquent peers because they provide opportunities by which social reputations of choice are sculptured, exhibited, and finely tuned. What we have presented in this final chapter thus far is more commensurate with this prototype – the young person who makes a deliberate choice to pursue a delinquent social image and publicly engages in nonconforming behaviors to promote and maintain this image. There are others, however, who Moffitt terms early-onset life-course persistent (LCP) individuals, who do not actively seek out peer groups to establish and maintain a social reputation of choice. Rather, these young people begin their delinquent/criminal type behavior very early in life and continue it through adolescence and into adulthood.

As we highlighted in Chapter 7, for LCP individuals the trajectory is predicted by undercontrolled temperament and delayed motor development at age 3 years, low verbal ability and hyperactivity, and poor scores on neuropsychological tests. We also provided evidence from previous research that impulsivity, or the inability to regulate self-control, is an important determinant of delinquent behavior. We then tested Moffitt's (1993) assertion that the criminal behavior of LCP offenders may be due to deficits in self-control (especially impulse control). Our evidence supported the claim that adolescent offender and non-offender groups are reliably differentiated with respect to impulsivity. We could not confirm differences between early-onset (LCP) versus late-onset (AL) offenders, but this may have been due to a lack of statistical power in our study.

Like Moffitt, we also delineated another subgroup of young people. According to Moffitt (2006), socially isolated individuals did not meet the criteria for membership of the LCP group because of their low level yet chronic frequency of offending. From our initial interview-based research with detention center officers, primary and high school teachers, and psychologists responsible for the welfare of young persons at risk, our attention was drawn to young people involved in delinquent activities who were not seemingly affiliated with a delinquent peer group. Contrary to traditional Reputation-Enhancement Theory, these young people committed their delinquent acts without the presence of an audience yet still achieved status and a social reputation among their peers.

In comparison with same-aged social delinquents, not only were these socially isolated young persons at risk more involved in delinquent activities, but also their activities were more aggressive and victim-oriented (Chapter 7). Interestingly, these socially isolated individuals (*loners*) also sought a different social image than did their socially delinquent peers. That is, the young persons at risk described in the previous chapters clearly expressed a desire to establish, enhance, and maintain a deviant and nonconforming reputation and actively pursued this through involvement in risk-taking behaviors in the presence of an audience.

Conversely, the young loners did not want to be perceived as conforming by their peers, but did not actively seek an outright public deviant reputation, which may be why they commit their delinquent activities without an audience.

### ***Where to from here?***

Whether loner status is a deliberate choice on the part of the individual or is a result of circumstances such as peer rejection may be an important determinant of the nature, timing, and severity of the delinquent activities committed. Moreover, how this applies to the early-onset or late-onset offender particularly in terms of the nature and consequences of friendship and the development of social reputations means further research is warranted. These loner individuals indulged in more violent types of delinquent activity, and research has suggested they tend to have behavioral characteristics or personality attributes that peers find aversive. Hence, more research is needed to examine how these individuals come to elect for particular patterns of delinquent behavior with little or no recourse to peer audiences. Given that research examining females at risk has not been as prolific as that for males, the social status, at-risk behaviors, and reputational orientations of this subset of potential delinquents should also be examined, particularly given that interventions aimed at social reputations may have to be gender specific. This suggestion is reinforced given Carroll, Houghton, Khan, and Tan's (2007) findings that, whereas at-risk females share with their at-risk male counterparts an admiration of socially deviant activities, they differ from their male peers in that they appear to avoid overt types of inappropriate behaviors in school for fear of damaging their reputation. This may provide a key for prevention and intervention program development.

## **Psychopathology in Young Persons and Risk**

Throughout the majority of this book, we have highlighted the significance of choice with regard to involvement in delinquency by young persons at risk. Involvement in risky behavior initiates and subsequently maintains a delinquent reputation. For others, however, risk is inherent as a result of pathology (e.g., undiagnosed or diagnosed disorders). According to Moffitt's taxonomy, at ages 15 and 18 years the LCP trajectory is differentially associated with, among other things, psychopathic-like personality traits and at age 26 years with a more psychopathic personality profile. A combination of a callous/unemotional (C/U) interpersonal style along with hyperactivity/impulsivity and inattention (HIA) and conduct problems (CP) is also said by some researchers to constitute *fledgling psychopaths*. For these individuals, social identity appears to go before them rather than them having to seek and establish a reputation through their involvement in delinquent activities.

In Chapter 8, we provided a brief overview of this subgroup of young persons who exhibit characteristics similar to that of adults with psychopathy (Frick et al., 2000), and we followed this up with a direct test of the *Fledgling Psychopath Hypothesis*. Basically, the Attention-Deficit/Hyperactivity Disorder (ADHD) plus Conduct Disorder (CD) group were expected to exhibit higher levels of psychopathy than *either* the ADHD-only *or* the CD-only group as predicted by the Fledgling Psychopath Hypothesis. Using a carefully delineated sample of boys, our findings were somewhat mixed. One set of analyses did not support the predictions made on the basis of the Fledgling Psychopath Hypothesis. Group comparisons of a community sample and young persons with CD only, ADHD only, or ADHD plus CD suggested a tentative link between the combination of ADHD/CD symptoms and C/U traits.

The very name *fledgling psychopath* appears to foreshadow a reputation characterized by aggression, serious violent offending, and infringing the norms of society and the rights of others. Johnstone and Cooke (2004, p. 105) asserted there is potential for devastating consequences as a result of the misuse of the construct, and Vaughn and Howard (2005) suggested the term *fledgling psychopath* must be used with extreme caution because of the pejorative nature of the label.

To date, however, the field of reputation enhancement in the context of children and adolescents with psychopathic-like traits remains relatively unexplored. As we highlighted in Chapter 8, what appears to be the only evidence to date is a study by Tan (2008) of suspended and nonsuspended mainstream high school students. Those identified as having elevated C/U trait scores described themselves as being delinquent, mean, tough and as breaking rules, and admiring others involved in similar acts of social deviancy. They also wanted others to view them as nonconforming and as having a bad reputation, and they did not communicate positive or negative events to anyone. Compared with other delinquents, the high C/U trait individuals did not inform peers of their behavior (see Carroll et al., 2003). Identifying specific reputational orientations is an important finding. Whether these young persons choose to actively seek such a reputation is not known, however, and therefore the potential for the development of social-psychological-based treatments is yet to be optimized.

### ***Where to from here?***

As we highlighted in the final section of Chapter 8, concerns have been expressed over the construct of psychopathy in children and adolescents along with issues pertaining to current instrumentation in the assessment of psychopathy (i.e., not developmentally informed nor specifically designed for nonreferred youth) (Cordin, 2007; Houghton et al., 2007). Therefore, research is necessary to construct and validate strong measurement tools so that a more comprehensive understanding of the construct of psychopathic-like traits in young persons and the Fledgling Psychopath Hypothesis can be obtained.

Early-onset life-course persistent individuals tend to specialize in more serious offenses, account for five times more of violent offenses than their adolescent-limited counterparts, and are significantly worse on emotional reactivity and callousness, even in the face of strong treatment (Moffitt, 1993, 2003; Moffitt & Caspi, 2001; Rice, Harris, & Cormier, 1992). Thus, given that from an early age the antisocial trajectory appears to be defined for this group and that the pathway is differentially associated by psychopathic personality traits, research must focus on child populations. Assessing groups of young children such as those who are referred to clinical and forensic settings, those who present with difficult temperaments, neuropsychological deficits, general disruptive behavior, physical and verbal aggression, and those who are suspended from mainstream schools may permit a more comprehensive understanding of the construct of psychopathy. Incorporating measures of reputational orientations would also allow the importance of this variable to be examined with these groups. In doing so, effective interventions may be developed that prevent the onset of serious antisocial behavior, which is exhibited very early in life.

## **Treatment and Interventions for Young Persons at Risk**

As is evident in the research literature, a range of treatment programs are available for young persons at risk. In Chapter 9, family treatments, parent-training programs, school-based programs, youth justice conferencing, individual and group cognitive-behavioral programs, adventure therapy or wilderness programs, and boot camp programs were reviewed, all of which have been implemented with varying degrees of success with young persons at risk. We also examined the development of multimedia-based treatments, which are said to promise much, prior to introducing *Mindfields*. Rather than being a cognitive-behavior therapy program, *Mindfields* is a model of change that involves the development of self-regulatory life skills to divert individuals from a life of crime and prevent future offending behaviors. *Mindfields* is based on 15 years of research identifying issues associated with delinquency that also forms the core of this book.

Indulging in a range of risk-taking behaviors, almost always in the presence of an audience, appears critical for young persons' transition from risk to active involvement in delinquent activity. This is not to say that it is an absolute prerequisite, because, as stressed above, there are some young persons who are loners who commit their delinquent activities without an audience. Irrespective of the presence or absence of an audience, a specific reputation is sought by these young persons at risk. How it is communicated is yet to be investigated. This will have important implications for the development and implementation of treatment programs.

In conclusion, to design specific interventions for young persons at various points along the trajectory, we need to fully understand how the *early-onset*

*life-course persistent, late-onset adolescent-limited, socially isolated adolescent loner, and severely antisocial young person with psychopathic-like traits* are different. Understanding the unique developmental patterns of each group may allow interventions to be designed that prevent or alter an individual's progression along the trajectory, whether it is theirs by choice or circumstance. For those who deliberately choose to pursue a nonconforming reputation, intervention programs should focus on supporting these individuals by designing programs such as *Mindfields* that embrace and make use of skills held. Moreover, if these young people are to be engaged in the school system, we need to strengthen the ways in which schools actually cater for and support them in their education. A range of measures need to be considered to allow for more flexibility so that young people at risk are better equipped for the demands of society (e.g., offering programs of workplace learning and community activities, providing school-to-work transition programs, using mentors for young people at risk of disengaging from school). For those individuals identified with psychopathic-like traits, interventions must be implemented with great caution as most to date have proved to be ineffective.

## Concluding Comments

Our focus in this book has been on the motivations of youth at risk and the trajectories they pursue on their routes to delinquent behavior. We have considered the motivations and rewards of activities such as antisocial behavior (in and out of school), substance use, volatile inhalant consumption, body-modification practices, and car theft. Following Emler and Reicher (1995), we have argued that, for some young people, involvement in delinquent activities is a deliberate choice. We have considered why they make that choice, drawing on findings in the literature and from our own research. We have also investigated the less frequent trajectories into crime, such as those of individuals who enter into antisocial behavior very early and continue or intensify the problems (life-course persistent offenders in Moffitt's terms [Moffitt, 1993]), and those who pursue enduring engagement in crime with indifference to the social audience. Nevertheless, we have argued that much adolescent risk-taking and offending needs to be understood in relation to the social purposes it serves and the goals that are met by undertaking it.

We have also examined the careful research and systematic treatments that have been conducted with youth at risk and have summarized the strategies that are promising and the factors that remain to be addressed. Theoretically grounded, intensive systematic programs that are attuned to the contexts and motivations of the young people can and do make a difference. Investigating these contexts and motivations is the principal way in which researchers can contribute to these broader goals.

There can be no doubt that developing a greater understanding about the delinquent trajectories of young people at-risk along with the social-psychological

mechanisms such as reputation maintenance are critical. Young persons at risk go to great lengths to cultivate and protect their reputations of choice. Similar care must also be taken by those responsible for developing and delivering intervention programs that seek to change the social identities of these young people for the better if the trajectory toward deviancy is to be broken.

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# Index

Note: The letters 'f' and 't' following the locators refer to figures and tables respectively

## A

- Abusive phone calls, 75
  - Academic Image (educational, interpersonal goals), *see* Goals Scale
  - Accuracy Game (adapted), 108
  - Adapted Self-Report Delinquency Scale (ASRDS), 36–39, 53, 77, 82, 83, 108, 109, 155
  - ADHD, *see* Attention-deficit/hyperactivity disorder (ADHD)
  - Adolescent-limited (AL), late-onset, 9, 13–14, 98, 105–107, 109, 110–113, 161, 166–167, 169–170
  - Adolescent preventive services, guidelines for, 93
  - Adolescents at risk
    - behavior-management systems to enhance reputations, 72–74
    - behavior-management strategies, 72
    - reputational profiles, 76–82
    - Adapted Self-Report Delinquency Scale, 77
    - reputation enhancement, age, and level of delinquency involvement, 80–82
    - reputation enhancement, gender, and level of delinquency involvement, 77
    - Reputation-Enhancement Scale, 77, 78t
    - reputation as goal-directed, 82–86
    - ethnicity/nonconforming reputations of delinquent, at-risk /not-at-risk young people, 85–86
    - family structure/ethnicity/delinquency/goals, reputations, 83–84
    - means for nonconforming reputation variables by risk level, 86f
    - means for self-report delinquency offense variables by risk level, 85f
    - self-presentation of delinquent, at-risk/not-at-risk young people, 84
    - self-reported delinquency of the three risk-level groups, 84
    - trajectories of delinquent activity among at-risk high school students, 75–76
    - Rasch model, 76
  - After-school management strategies, 74
  - Aggression, 11, 14, 21, 26, 30, 55–56, 84, 94, 109–110, 114–115, 117, 121–124, 126, 128–129, 131–136, 138, 156, 168–169
  - Antisocial Process Screening Device (APSD), 124
  - APSD, *see* Antisocial Process Screening Device (APSD)
  - Arson, 2, 76
  - ASRDS, *see* Adapted Self-Report Delinquency Scale (ASRDS)
  - Assault, 2, 37–38, 56, 69, 75–76, 83–85, 89, 94, 123, 137, 148
  - At-risk adolescents, 19
  - Attention-Deficit/Hyperactivity Disorder (ADHD), 9, 120, 168
  - Australian self-report delinquency scale (Mak, 1993), 36
- ## B
- Backup reinforcers, 72
  - Bagging, 97
  - Beeper systems, 72
  - Behavioral contracting, 72
  - Body tattooing/piercing, 87, 89, 91–92, 100–104, 163–165
  - Break-and-enters, committing, 75

**C**

- CAFAS, *see* Child and Adolescent Functional Assessment Scale (CAFAS)
- Callous and unemotional (C/U) traits, 120, 124
- Camp fire, 147
- CASA, *see* National Center on Addiction and Substance Abuse (CASA)
- CASASTART program, 143
- CBT, *see* Cognitive-behavioral skills training (CBT)
- Changing My Life Scale (CMLS), 155
- Child and Adolescent Functional Assessment Scale (CAFAS), 140
- Children at risk, initiating goals and reputations
  - initiating social identity, 58–68
  - social reputations and goals by deliberate choice, 58
  - See also* Social identity through goals and reputation, initiation of
- Children's Activity Questionnaire, 28, 58
- Children's development, factors of negative impact, 56
- Children's interests: Development and gender differences*, 58
- Chronics, low level, 105
- Classic strain theories, 10–11
- CMPs, *see* Contingency management programs (CMPs)
- Cognitive-behavioral interventions, young persons
  - CBT-coping program, 145
  - efficacy of cognitive-behavioral programs, 145
  - individual programs and residential and community programs, 145
  - supportive/psychodynamic therapy, 146
- Cognitive-behavioral skills training (CBT), 144, 154, 157
- Computer-based intervention program (SMART Talk), 153
- Computerized Time Perception task, 155
- Conduct problems (CP), 113, 116, 120, 157
- Contingency management programs (CMPs), 157
- Cronbach's alpha and items/factor loadings for adapted self-reported delinquency scale, 38*t*
- for importance of goals scale, 41*t*–42*t*

- Cronbach's alpha for the reputation-enhancement scale, items/factor loadings and, 47*t*–50*t*
- Cultural deviance theories, 10
- C/U traits, *see* Callous and unemotional (C/U) traits

**D**

- Delinquency
  - goals, 19, 35, 40–41, 59, 64, 66, 83, 86, 163
  - and impulsivity, differential patterns of, 106–107
  - impulsivity, dimensions of, 107
- theories of
  - adolescent-limited offenders, 13
  - classic strain theories, 10–11
  - cultural deviance theories, 10
  - developmental theories of delinquency, 12
  - life-course persistent offenders, 13–14
  - psychopaths, 14
  - rational choice theory, 12
  - reputation-enhancing goals model, 15
  - revised strain theory, 11
  - social control theories, 11
  - social learning theories, 12
  - symbolic interactionist theory, 12–13
- Delinquent activity among at-risk high school students
  - Australian Temperament Project (ATP), 74
  - fighting, 75
- Detention, 74
- Developmental taxonomy, 13
- Developmental theories of delinquency, 12
- Deviancy, developmental trajectories of attaining/maintaining social identity of choice, 161–163
  - behavior-management strategies in schools, 161–163
  - rechanneled delinquent activities, 163
  - suggestions for research, 163
- early-onset life-course persistent and late-onset adolescent-limited offenders, 166–167
  - loner status, 167
- initiating and establishing reputations, 159–161
  - focus on goals, 160
- psychopathology in young persons and risk, 167–169
  - combination of C/U and HIA/CP, 167
  - fledgling psychopath, 168

- risk taking and social identity of choice, 163–165
    - “maturity gap” hypothesis, 163
    - research, suggestions for, 165
    - tattooed individuals, 164
    - See also* Young people at risk, factors placing
  - treatment and interventions for young persons at risk, 169–170
  - Mindfields, 170
  - See also* Early-onset life-course persistent and late-onset adolescent-limited offenders; Young persons at risk, treatment and interventions for
  - “Do your best”, 23
  - Drug(s), 21, 25–27, 37–38, 40–41, 47, 76, 79, 90, 92, 94–95, 97, 101, 110, 146
    - abuse, 30, 96, 100
    - dealing (trafficking), 27, 52, 86, 143
    - (hard) use, 75, 90–93, 95, 97, 101, 109, 152, 163, 165
    - related, 37, 38, 83–84, 94, 99, 100
    - taking, 77, 137, 149
    - users, 98, 100
  - Dusting, 97
- E**
- Early-onset life-course persistent and late-onset adolescent-limited offenders
    - delinquency and reputational orientations as function of loner or nonloner status, 115*f*
    - differential patterns of delinquency/impulsivity, 106–107
    - impulsivity, dimensions of, 107
    - impulsivity and juvenile delinquency in early-onset and late-onset offenders and nonoffenders, 107–113
    - accuracy game (adapted), 108
    - Adapted Self-Report Delinquency Scale (ASRDS), 108
    - Eysenck Impulsiveness Questionnaire (adapted), 109
    - Risk-Taking Game (adapted), 108–109
    - Stroop Color and Word Test, 108
    - Time Perception, 108
  - National Longitudinal Study of Adolescent Health, 114
  - adolescent loners, 114
  - psychopathic-like tendencies and young persons at risk
    - callous/unemotional (C/U) interpersonal style, 116
    - Fledgling Psychopath Hypothesis, 116
    - hyperactivity/impulsivity and inattention (HIA), 116
  - Reputation-Enhancement Scale
    - Adapted Self-Reported Delinquency Scale, 114
  - social reputations of loners, 113–114
  - adolescent loners, 113
  - study, delinquency/reputational orientations of loner and nonloner delinquents, 114–116
    - Adapted Self-Reported Delinquency Scale, 114
    - as function of loner/nonloner status, 115*f*
  - Early-onset life-course persistent (LCP) offenders, 105
  - Educational and career goals, 24, 39
  - Extensible Markup Language (XML), 155
  - Eysenck Impulsiveness Questionnaire, 109, 155
- F**
- Family, viii, xi, 1, 3–8, 11–13, 18, 25, 27, 29, 52, 56, 59, 82–84, 139, 140–144, 150–152, 158–159, 169
  - Fledgling psychopath hypothesis, 116, 119, 121–128, 132–133, 135–138, 168
    - aggression, measurement, 124
    - aggression questionnaire, 123
    - anger, 124
    - Antisocial Process Screening Device (APSD), 124
    - dimensions of psychopathy, 124
    - Fit statistics and indices for four CFA models on PSD, 126*t*
    - full-sample descriptive statistics and correlations for PSD subscales, 127*t*
    - indirect aggression, 124
    - institutions Human Research and Ethics Committee, 124
    - Path coefficients for two-factor model of PSD, 127*t*

Fledgling psychopath hypothesis, (*cont.*)  
 Psychopathy Checklist–Revised (PCL-R), 124  
 Psychopathy Screening Device (PSD), 123  
 rotated factor loadings for items in AQ, 128*t*  
 Rotated factor loadings for items in the SNAP-IV, 125*t*  
 Swanson, Nolan and Pelham Teacher and Parent Rating Scale-IV, 123  
 verbal aggression, 124  
 Fledgling psychopaths, 116, 119, 122, 137, 167, 168  
 Force for extortion purposes, 75  
 Freedom/autonomy goals, 40

## G

Gatherings, informal, 147  
 Glading, 97  
 Goal-Setting Theory, 17, 22–26  
 goal commitment, 23–24  
 goal difficulty or challenge, 23  
 goal feedback, 23–24  
 increased attention to task, 24  
 goals of high/low-achieving young people, differences in, 25  
 goal type or content, 24  
 freedom/autonomy goals, 25  
 Goals Scale  
 factor loadings for 8 first-order factors of two second-order factors, 43*f*  
 factor loadings for the 15 first-order factors of three second-order factors, 50*f*  
 importance of  
 delinquency goals, 40  
 differences in level of importance, 44  
 educational and career goals, 39  
 factor loadings for 8 first-order factors of the two second-order factors, 43*f*  
 freedom/autonomy goals, 40  
 interpersonal goals, 40  
 physical goals, 40  
 self-presentation goals, 40  
 status goals, 40  
 univariate analysis of variance using eight first-order factors as dependent variables and risk-level groups as independent variables, 43*t*  
 Good-behavior board game, 72  
 Good student game, 72

## H

Hang Out (Mindfields program), 155  
 HIA, *see* Hyperactivity/impulsivity and inattention (HIA)  
 Hostility, 124  
 Huffing, 97  
 Hyperactivity/impulsivity and inattention (HIA), 116, 120

## I

IDU, *see* Injection drug use (IDU)  
 Impulsivity  
 accuracy and risk-taking behavior tasks, 111  
 Eysenck impulsivity score as function of history of offending, 111*f*  
 and juvenile delinquency in early-onset and late-onset offenders and nonoffenders, 107–113  
 Accuracy Game (Adapted), 108  
 Adapted Self-Report Delinquency Scale (ASRDS), 108  
 Eysenck Impulsiveness Questionnaire (Adapted), 109  
 Risk-Taking Game (Adapted), 108–109  
 Stroop Color and Word Test, 108  
 Time Perception, 108  
 mean delinquency/impulsivity scores as function of history of offending, 110*f*  
 personality variables of impulsivity, 109  
 speed–accuracy task, 112  
 time perception as a function of history of offending, 111*f*  
 Incident barometer programs, 72  
 In-class time-out, 72  
 Individual therapy (IT), 140  
 Injection drug use (IDU), 97  
 Institutional aggression, 121  
 Interactive multimedia–based programs, young persons, 152–157  
 advantages of, 152  
 computer-based intervention program (SMART Talk), 153  
 mindfields program, 153–154  
 Interpersonal goals, 28, 29, 40–41, 43–44, 60, 64, 66  
 Interventions (school-based), young persons, 142–143  
 CASASTART program, 143

- National Center on Addiction and Substance Abuse (CASA), 142, 143  
 school-based socialemotional competence program, 142  
 IT, *see* individual therapy (IT)
- J**  
 Juvenile delinquency, 1, 2, 3, 7, 15, 107–113, 139, 142, 143
- L**  
 LCP offenders, *see* Early-onset life-course persistent (LCP) offenders  
 Life-course persistent offenders, 14  
 Life Satisfaction Scale for Problem Youth (LSSPY), 156*f*  
 Loner and nonloner delinquents, delinquency and reputational orientations of, 114–116  
 Adapted Self-Reported Delinquency Scale, 114  
 delinquency and reputational orientations, 115*f*  
 Loners, social reputations, 113–114  
 loners, adolescent, 113  
 Low level chronics, 105  
 Low socioeconomic status (LSES), 6  
 LSES, *see* Low socioeconomic status (LSES)  
 LSSPY, *see* Life Satisfaction Scale for Problem Youth (LSSPY)
- M**  
 Mak's Self-Report Delinquency Scale, 37  
 MANOVAs, *see* Multivariate analyses of variance (MANOVAs)  
*Mask of Sanity, The*, 119  
 "Maturity gap" hypothesis, 163  
 MFGI, *see* Multiple-family group-intervention (MFGI)  
 MICFA, a first-order, maximum-likelihood confirmatory factor analysis program, 35  
*Mindfields: A Self-Regulatory Intervention to Empower Young People at Risk to Change Their Lives*, 139  
 Mindfields Interactive Screening Tool (MIST), 154–156  
 Mindfields program  
 Adolescent Problem Inventory – Modified, 155  
 Changing My Life Scale (CMLS), 155  
 characteristics, 154  
 Computerized Time Perception task, 155  
 delay of gratification task, 155  
 Extensible Markup Language (XML), 155  
 Eysenck Impulsiveness Questionnaire (adapted), 155  
 facilitators, importance of, 154  
 hang out, 155  
 MIST (Mindfields Interactive Screening Tool), 155  
 Modified-Adapted Self-Report Delinquency Scale, 155  
 Short-Form Self-Regulation Questionnaire (SSRQ), 155  
 Social Problem Solving Inventory-Revised Short Form (SPSI-R Short Form), 155  
 Test Your Reflexes task, 155  
 MIST, *see* Mindfields Interactive Screening Tool (MIST)  
 Modified-Adapted Self-Report Delinquency Scale, 155  
 Motor vehicle offenses, 75  
 MST, *see* Multisystemic therapy (MST)  
 Multiple-family group-intervention (MFGI), 141  
 Multisystemic therapy (MST), 138–140  
 Multivariate analyses of variance (MANOVAs), 36, 42, 51, 65, 67, 121, 129
- N**  
 Narcissism, 121–122, 124, 129, 130, 134–135, 137  
 National Center on Addiction and Substance Abuse (CASA), 142  
 National Longitudinal Study of Adolescent Health, 114  
 National Survey on Drug Use and Health (NSDUH), 92, 97  
 Negative reinforcement, 72  
 Nighttime bush navigation, 148  
 Nonconforming reputation  
 variables by risk level, means for, 86*f*  
 NSDUH, *see* National Survey on Drug Use and Health (NSDUH)  
 NSDUH (2006) of illicit substances, 92*f*

**O**

ODD, *see* Oppositional Defiant Disorder (ODD)

Offending, mean delinquency/impulsivity scores as function of, 110*f*

Oppositional Defiant Disorder (ODD), 121, 122

Outdoor programs, opportunities, 147

**P**

Pain-avoidance behavior, 11

Parent management training (PMT), 157

Parent(s), vii, xii, 3–4, 6, 8, 11, 21, 40, 44, 47–48, 55, 61, 77–78, 83–84, 91–92, 98, 103, 115, 123–124, 138–139, 140–142, 157, 169

Parent training and family interventions, young persons, 139–142  
ineffective family practices, role of, 139  
multiple-family group-intervention (MFGI), 141

PCL-R, *see* Psychopathy Checklist - Revised (PCL-R)

Peer-group behaviors, 93

Physical goals, 25, 29, 40, 43, 44, 66, 148, 149

PMT, *see* Parent management training (PMT)

Positive compliance, 72

Predatory aggression, 121

Proactive aggression, 121

Protective factors, summary of, 9*t*

Psychopathic-like tendencies and young persons at risk  
callous/unemotional (C/U) interpersonal style, 116

Fledgling Psychopath Hypothesis, 116  
hyperactivity/impulsivity and inattention (HIA), 116

Psychopathology in young persons and risk combination of C/U and HIA/CP, 167  
fledgling psychopath, 168

Psychopaths, 14, 116, 119–120, 122, 137–138, 167

Psychopathy Checklist - Revised (PCL-R), 124

Psychopathy in children and adolescents and fledgling psychopath hypothesis  
child and adolescent psychopathy, overview, 119–121  
characteristics/categories, 119  
proactive/predatory/reactive aggression, 119

diagnostic group differences in levels of psychopathy and aggression, 128–132

ANOVA/MANOVA, 128

descriptive statistics and correlations for subscales of AQ, 129*t*

descriptive statistics for AQ subscales by diagnostic group, 131*f*

descriptive statistics for PSD subscales by diagnostic group, 129*t*

mean scores on AQ across diagnostic groups, 132*f*

patterns of means across groups on PSD subscales, 130*f*

univariate ANOVAs on AQ subscales, 132*f*

univariate ANOVAs on PSD subscales by diagnostic group, 130*t*

psychopathic-like traits and psychopathology, fledgling psychopath hypothesis, 121–123

Psychopathy Screening Device, 122

relationships between levels of ADHD/CD symptomatology/psychopathy/aggression, 132–137

path diagram of significant direct relationships between ADHD/CD symptom ratings, psychopathy, and aggression, 135*f*

summary of direct and indirect effects in path model, 134*t*

study, testing fledgling psychopath hypothesis, 123–128

*See also* Fledgling psychopath hypothesis

**R**

Rasch Unidimensional Models for Measurement (RUMM 2020), 75

Rational choice theory, 12

Reactive aggression, 121

RedCliff Ascent Program, 150

REG, *see* Reputation-Enhancing Goals (REG)

Reinforcement and punishment, 72

Reputation, 19

choice of, 21

Reputation-Enhancement Scale, 27, 35, 44–53, 58–60, 61, 64, 65, 77, 78*t*, 82–83, 99, 114

estimates of reliability (Cronbach's alpha), 47

- factor loadings for 15 first-order factors of the three second-order factors, 50*f*
- ideal public self items, 45
- items/factor loadings and cronbach's alpha for reputation-enhancement scale, 47*t*–50*t*
- self-perception of private/public self items, 45
- social desirability items, 45
- univariate analysis of variance using 15 first-order factors as dependent variables and risk-level groups as independent variables, 52*t*
- Reputation-Enhancement Scale Adapted Self-Reported Delinquency Scale, 114
- Reputation-enhancement theory, 17
- Reputation-Enhancing Goals Model, 2, 13, 17, 57
- Reputation-Enhancing Goals (REG), 17, 18–19
  - theory of deliberate choice
    - associated regulating factors in management of reputations, 32
    - associated regulating factors in management of reputations, 32
    - goal-setting theory, 22–26
    - integrated model of reputation-enhancing goals, 18*f*
    - model, overview, 18–19
    - reputation-enhancement theory, 19–22
    - research evidence for integrated model, 26–32
    - role of individuals' resources in management of reputations, 31–32
- Resilience
  - domains associated with, 6–7
  - factors, 150
- Revised strain theory, 11
- Risk
  - children and adolescents
    - intensity of, 2
    - intensity of, 2
    - involvement in activities, 2
    - protective factors and the vulnerability, 2–3
    - See also* Young people at risk, factors placing
  - Risk factors, summary of, 4*t*–5*t*
    - See also* Young people at risk, factors placing
  - Risk-taking behavior
    - adolescent risk taking and reputation-enhancing goals model, 91–92
    - alcohol use and reputations, 94–96
      - age-related trends, 95–96
      - reasons, 94
    - body modifications and reputations, 100–103
      - illustrations used in booklet “Who is it?”, 102*f*
      - tattoos and piercing, 100
      - theory of deliberate choice, 103
    - definition, 89
    - severity of problem, 89–91
      - sexual behaviors, 90
      - tobacco use, 90
      - unintentional injuries, 90
    - substance use and reputations, 92–94
      - Guidelines for Adolescent Preventive Services, 93
      - social-psychological theories of adolescent drug use, 93
    - use of volatile inhalants and reputations, 96–100
      - effects of, 97
      - injection drug use (IDU), 97
      - young people's perceptions, 99
  - Risk-Taking Game (adapted), 108–109
  - Rochester Longitudinal studies, 56
- S**
- School-based behavior management systems, 27
- School-based interventions, young persons, 142–143
  - CASASTART program, 143
  - National Center on Addiction and Substance Abuse (CASA), 142, 143
  - school-based social emotional competence program, 142
- School property, damaging, 75
- Self-efficacy beliefs, 29
- Self-identity/-presentation, 19
- Self-presentation
  - goals, 40
  - theory, 17
- Self-regulation, processes, 1, 3, 15, 16, 29, 32, 55, 106, 154–156
- Self-report delinquency offense variables by risk level, means for, 85*f*

- Self-Report Delinquency Scale, 35–39
- Sexual activity, 89, 92, 94, 163, 165
- Short-Form Self-Regulation Questionnaire (SSRQ), 155, 156*f*
- SMART Talk (computer-based intervention program), 153
- Social/academic image, 28
- Social and adaptive behaviors, development of, 149
- Social control theories, 11
- Social identity through goals and reputation, initiation of
- comparison of factor loadings of high school sample and primary school sample
  - for each item of importance of goals scale, 59*t*–60*t*
  - for each item of reputation-enhancement scale, 61*t*–63*t*
- congruence coefficients for
- factors of the importance of goals scale and reputation-enhancement scale, 64*t*
- factor loadings for eight first-order factors on two second-order factors, 64*f*
- observed means for reputation-enhancement variables with independent variable of risk level and gender, 67*t*
- Social image (delinquency, freedom/autonomy goals), *see* Goals Scale
- Social learning, 154, 157
- Social learning theories, 10, 12, 93, 144
- Social Problem Solving Inventory-Revised Short Form (SPSI-R Short Form), 155
- Social-psychological theories of adolescent drug use, 93
- SPSI-R Short Form, *see* Social Problem Solving Inventory-Revised Short Form (SPSI-R Short Form)
- SSRQ, *see* Short-Form Self-Regulation Questionnaire (SSRQ)
- Status goals, 40
- Stealing, 25–27, 46–47, 52, 67, 69, 77, 79, 84, 87, 109, 110, 114–115, 117, 123, 137, 148
- Stroop Color and Word Test, 108
- SURE START Research Team, 6
- Survival training, 148
- Suspension at school, reasons for, 56
- SWATRAD, *see* Therapy Research and Development (SWATRAD) project
- Symbolic interactionist theory, 12–13
- Systemic Wilderness Adventure, 150
- T**
- Teachers, xii, 8, 11, 21, 26, 35, 36, 40, 47, 55–56, 69, 72–74, 113, 122, 124, 137, 160–161, 166
- Test Your Reflexes task (Mindfields program), 155
- Theft, viii, 2, 14, 26–27, 33, 37–38, 75, 83–85, 123, 170
- Therapy Research and Development (SWATRAD) project, 150
- Time-out, 74
- Time Perception, 108
- Token economies, 72
- Treatment as usual (TAU), 140
- Truant/Truancy/ truancing, 2, 4, 11, 36, 38–39, 61, 67, 69, 79, 100, 142
- Tucker–Lewis index of goodness-of-fit, 37, 40, 46
- U**
- Univariate analysis of variance
- using eight first-order factors as dependent variables and risk-level groups as independent variables, 43*t*
  - using the 15 first-order factors as dependent variables and risk-level groups as independent variables, 52*t*
- Univariate F statistics
- observed means/standard deviations for reputation-enhancement variables ( $df/41906$ ) with delinquency involvement as the independent variable, 78*t*
  - observed means/standard deviations for the reputation-enhancement variables ( $df/41906$ ) with gender as the independent variable, 79*t*
  - observed means/standard deviations (in parentheses) for the interaction effect between age and delinquency involvement for the reputation-enhancement variables, 81*t*
- U.S. Youth Risk Behavior Surveillance, 90



## V

- Vandalism, 2, 11, 14, 37–39, 75, 83, 85
- Volatile inhalants and reputations, use of, 96–100
- Volatile inhalant, viii, 96, 98–100, 104, 164–165, 170
- Volatile inhalant use (VIU), 96, 163–164

## W

- Western Australian Legislative Assembly Select Committee on Youth Affairs, 36, 58
- “Which Group” picture test booklet, 95–96
- “Who is it?”, sets of illustrations used in booklet, 102*f*
- Wilderness boot camps, young persons, 150–152
  - critics, on, 151
- Wilderness programs for youth at risk, 147–150, 150
  - camp fire, 147
  - development of social and adaptive behaviors, 149
  - goals, 148
  - informal gatherings, 147
  - night time bush navigation, 148
  - outdoor programs, opportunities, 147
  - RedCliff Ascent Program, 150
  - resilience factors, 150
  - survival training, 148
  - Systemic Wilderness Adventure, 150
- Wilderness therapy, 149

## X

- XML, *see* Extensible Markup Language (XML)

## Y

- Y-OQ, *see* Youth Outcome Questionnaire (Y-OQ)
- Young people at risk, factors placing, 3–6
  - community risk factors, 6
  - family risk factors, 3–5
  - individual risk factors, 3
  - peer risk factors, 5
  - school risk factors, 5
- Young persons, measuring delinquency/ goals/ reputational orientations in adapted self-report delinquency scale, 36–39

- See also* Self-report delinquency scale general method, 35–36
- importance of goals scale, 39–44
- See also* Goals Scale reputation-enhancement scale, 44–55
- Young persons at risk, treatment and interventions for
  - cognitive-behavioral interventions
    - CBT “coping” program, 145
    - efficacy of cognitive-behavioral programs, 145
    - individual programs and residential and community programs, 145
    - supportive/psychodynamic therapy, 146
  - interactive multimedia-based programs, 152–157
    - advantages of, 152
    - computer-based intervention program (SMART Talk), 153
    - Mindfields program, 153–154
  - parent training and family interventions, 139–142
    - ineffective family practices, role of, 139
    - multiple-family group-intervention (MFGI), 141
  - school-based interventions, 142–143
    - CASASTART program, 143
    - National Center on Addiction and Substance Abuse (CASA), 142, 143
    - school-based social emotional competence program, 142
- wilderness boot camps, 150–152
  - critics, on, 151
- wilderness programs for youth at risk, 147–150, 150
  - camp fire, 147
  - development of social and adaptive behaviors, 149
  - goals, 148
  - informal gatherings, 147
  - nighttime bush navigation, 148
  - outdoor programs, opportunities, 147
  - RedCliff Ascent Program, 150
  - resilience factors, 150
  - survival training, 148
  - Systemic Wilderness Adventure, 150
  - Therapy Research and Development (SWATRAD), 150
  - Youth Outcome Questionnaire (Y-OQ), 150

- Young persons at risk, treatment and interventions for (*cont.*)
  - youth justice conferencing
  - restorative justice, 144
- Youth at-risk early involvement with crime
  - children and adolescents at risk, 2–3
  - factors placing young people at risk, 3–6
  - factors that protect youth at risk, 6–7
  - resilience, 6
- self-regulation and delinquent involvement, 15–16
- theories of delinquency, 10–15
- See also* Delinquency
- youth at risk and involvement in delinquency
  - psychopathology and involvement in delinquency, 9
- Youth Outcome Questionnaire (Y-OQ), 150