

SECOND EDITION

THE EFFECTIVE TEACHER'S GUIDE TO BEHAVIOURAL AND EMOTIONAL DISORDERS

Disruptive behaviour disorders,
anxiety disorders, depressive
disorders and attention deficit
hyperactivity disorder



MICHAEL FARRELL



The Effective Teacher's Guide to Behavioural and Emotional Disorders

‘Michael Farrell offers well sourced overviews of the conflicting and contradictory advice that is available to schools, suggests a variety of solutions to challenges, empowering the reader to make their own choices . . .’ Carol Smart, *Special Needs Information Press*

Fully updated with the latest research and advice on best practice, this new edition of *The Effective Teacher's Guide to Behavioural and Emotional Disorders* covers a range of conditions that cause learning difficulties for children, including disruptive behaviour, attention deficit hyperactivity disorder, anxiety and depressive disorders. The theoretical underpinning is fully updated but also condensed in this edition to make way for more practical strategies for teachers.

Teachers are likely to meet children with varying types and degrees of emotional behavioural disorders. This comprehensive guide equips you with informed and practical strategies to ensure that all pupils are included and provided for in the best possible way. The new edition has also been adapted to be more widely relevant to readers in different countries, focusing more on the strategies that work regardless of national context.

Writing in his popular accessible style, Michael Farrell suggests the best ways of dealing with a variety of conditions, always with practical classroom situations in mind. In each section, the book:

- sets out the definitions of the condition
- looks at the range of provision
- suggests intervention and support strategies
- gives points for reflection and suggested further reading.

Highly accessible and authoritative, this book provides teachers with an invaluable resource to help you create a truly inclusive classroom.

Michael Farrell is a special education consultant working with schools, local authorities, voluntary organisations, universities and others in Britain and abroad. He has published extensively in this field.

**The Effective Teacher's Guides series,
all by Michael Farrell**

The Effective Teacher's Guide to Behavioural and Emotional Disorders: Disruptive Behaviour Disorders, Anxiety Disorders, Depressive Disorders and Attention Deficit Hyperactivity Disorder (2nd edition)

The Effective Teacher's Guide to Sensory and Physical Impairments: Sensory, Orthopaedic, Motor and Health Impairments and Traumatic Brain Injury (2nd edition)

The Effective Teacher's Guide to Autism and Communication Difficulties: Practical Strategies

The Effective Teacher's Guide to Dyslexia and other Specific Learning Difficulties: Practical Strategies

The Effective Teacher's Guide to Moderate, Severe and Profound Learning Difficulties: Practical Strategies

The Effective Teacher's Guide to Behavioural and Emotional Disorders

Disruptive behaviour disorders,
anxiety disorders, depressive
disorders and attention deficit
hyperactivity disorder

Second edition

Michael Farrell

First edition published as *The Effective Teacher's Guide to Emotional and Social Difficulties: Practical strategies*, 2006 by Routledge

This second edition published 2011
by Routledge

2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Simultaneously published in the USA and Canada
by Routledge

270 Madison Avenue, New York, NY 10016

Routledge is an imprint of the Taylor & Francis Group, an informa business

This edition published in the Taylor & Francis e-Library, 2010.

To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk.

© 2006, 2011 Michael Farrell

The right of Michael Farrell to be identified as author of this work has been asserted by him in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Farrell, Michael, 1948–

The effective teacher's guide to behavioural and emotional disorders : disruptive behaviour disorders, anxiety disorders, depressive disorders and attention deficit hyperactivity disorder / Michael Farrell.

p. cm.

Includes bibliographical references and index.

1. Problem children—Education—Handbooks, manuals, etc.
2. Problem children—Behaviour modification—Handbooks, manuals, etc.
3. Behaviour disorders in children—Handbooks, manuals, etc.
4. Effective teaching. I. Title.

LC4801.F373 2011

371.94—dc22

2010027111

ISBN 0-203-83435-6 Master e-book ISBN

ISBN13: 978-0-415-56569-1 (hbk)

ISBN13: 978-0-415-56568-4 (pbk)

ISBN13: 978-0-203-83435-0 (ebk)

Contents

<i>About the author</i>	vi
<i>Preface</i>	vii
1 What are emotional and behavioural disorders?	1
2 Pedagogy	8
3 Key perspectives	27
4 Disruptive behaviour disorders	46
5 Anxiety disorders and depressive disorders	66
6 Attention deficit hyperactivity disorder	86
7 Summary and conclusion	106
<i>Bibliography</i>	113
<i>Index</i>	124

About the author

Michael Farrell was educated in the United Kingdom. After training as a teacher at Bishop Grosseteste College, Lincoln, and obtaining an honours degree from Nottingham University, he gained a Masters Degree in Education and Psychology from the Institute of Education, London University. Subsequently, he carried out research for a Master of Philosophy degree at the Institute of Psychiatry, Maudsley Hospital, London, and for a Doctor of Philosophy degree under the auspices of the Medical Research Council Cognitive Development Unit and London University.

Professionally, Michael Farrell worked as a headteacher, a lecturer at London University and as a local authority inspector. He managed a national psychometric project for City University, London, and directed a national initial teacher-training project for the United Kingdom Government Department of Education. His present role as a private special education consultant includes work with children and families, schools, local authorities, voluntary organisations, universities, and government ministries.

His many books, translated into European and Asian languages, include:

- *Educating Special Children: An introduction to provision for pupils with disabilities and disorders* (Routledge, 2008)
- *Foundations of Special Education: An Introduction* (Wiley, 2009)
- *The Special Education Handbook* (4th edition) (David Fulton, 2009).

Preface

I am of course extremely pleased to be writing the preface to the second edition of this book, *The Effective Teacher's Guide to Behavioural and Emotional Disorders: Disruptive Behaviour Disorders, Anxiety Disorders, Depressive Disorders and Attention Deficit Hyperactivity Disorder*.

It was previously called *The Effective Teacher's Guide to Emotional and Social Difficulties: Practical Strategies* published in 2006. The first edition was very well received and I have listened to constructive comments from readers to inform my approach to the new edition.

I hope it continues to be useful and I again welcome comments from readers to ensure any future editions are as informative and helpful as possible.

Michael Farrell
Herefordshire
September 2010
dr.m.j.farrell@btopenworld.com



What are emotional and behavioural disorders?

Introduction

This book aims to provide an account of approaches that are effective in educating and encouraging the development of children and young people with emotional and behavioural difficulties.

This chapter sets the book in the context of ‘The Effective Teacher’s Guides’ series of which it forms a part, and explains the features of the new edition of this title. I outline the types of disabilities and disorders, including emotional and behavioural difficulties, that are the concern of special education in England and in the United States of America. I suggest potential readers likely to find the book useful, and I then describe the content of subsequent chapters.

‘The Effective Teacher’s Guides’ Series

‘The Effective Teacher’s Guides’ series published by Routledge concerns provision for different types of disabilities and disorders. These include cognitive impairment (‘learning difficulties’ in the UK and ‘mental retardation’ in the USA), autism, emotional and behavioural difficulties, reading disorder/ dyslexia and others. Each book in the series describes practical strategies that enable the educational progress and personal and social development of pupils with particular disabilities and disorders.

The titles in the series are:

- *The Effective Teacher’s Guide to Sensory and Physical Impairments: Sensory, Orthopaedic, Motor and Health Impairments and Traumatic Brain Injury* (2nd edition)
- *The Effective Teacher’s Guide to Behavioural and Emotional Disorders: Disruptive Behaviour Disorders, Anxiety Disorders, Depressive Disorders and Attention Deficit Hyperactivity Disorder* (2nd edition)

2 What are emotional and behavioural disorders?

- *The Effective Teacher's Guide to Autism and Communication Difficulties: Practical strategies*
- *The Effective Teacher's Guide to Dyslexia and Other Specific Learning Difficulties: Practical strategies*
- *The Effective Teacher's Guide to Moderate, Severe and Profound Learning Difficulties: Practical strategies*

The new edition

This book, *The Effective Teacher's Guide to Behavioural and Emotional Disorders: Disruptive Behaviour Disorders, Anxiety Disorders, Depressive Disorders and Attention Deficit Hyperactivity Disorder* is the second edition of a book previously called *The Effective Teacher's Guide to Emotional and Social Difficulties: Practical Strategies*, published in 2006.

The first edition was generously reviewed and well received by readers. The new edition seeks to keep aspects which readers say they found useful while improving its remit and structure. Consequently, this new edition is different from the previous one in two main ways.

First, it seeks to make the content more widely accessible to readers in different countries. The 2006 edition was set within the context of legislation and procedures in the UK. The new edition focuses more on strategies that work without undue reference to a particular national context.

Second, the new edition has been restructured to reduce repetition. Essentially, this has meant describing various perspectives in a single chapter and then showing how these approaches and others are relevant to different types of emotional and behavioural difficulties.

Types of disability and disorder and types of emotional and behavioural difficulties

In the USA, pupils considered to need special education covered by federal law meet two requirements: they have a defined disability, and the disability has an adverse educational impact. Categories of disability under federal law as amended in 1997 (20 United States Code 1402, 1997) are reflected in 'designated disability codes' including the following:

- 01 Mentally Retarded
- 02 Hard-of-hearing
- 03 Deaf
- 04 Speech and Language Impaired

- 05 Visually Handicapped
- 06 Emotionally Disturbed
- 07 Orthopaedically Impaired
- 08 Other Health Impaired
- 09 Specific Learning Disability
- 10 Multi-handicapped
- 11 Child in Need of Assessment
- 12 Deaf/Blind
- 13 Traumatic Brain Injury
- 14 Autism.

In England, a similar classification (Department for Education and Skills, 2005, *passim*) comprises:

- Specific learning difficulties (such as dyslexia, dyscalculia and dyspraxia)
- Learning difficulty (moderate, severe, profound)
- Behavioural, emotional and social difficulty
- Speech, language and communication needs
- Autistic spectrum disorder
- Visual impairment
- Hearing impairment
- Multi-sensory impairment
- Physical disability.

It will be apparent that several types of disabilities and disorders concern broad areas of development relating to all children, whether or not they have a disorder or disability. The areas of development and related disabilities and disorders are categorised in the UK and USA as follows:

UK	USA
Cognitive development	Mentally retarded
Emotional and social development	Emotionally disturbed
Communication development impaired	Speech and language
Physical and motor development/ health	Orthopaedically impaired/ Other health impaired

Clearly, the various disabilities and disorders relate to conceptions of typical development, syndromes or injury affecting several areas of

4 What are emotional and behavioural disorders?

development, the functioning of sensory faculties, and the supposed effects of brain processing.

‘Emotional disturbance’ (USA) or ‘behavioural, emotional and social difficulties’ (England) are considered in this book in terms of ‘disruptive behaviour disorders’ (including conduct disorder), ‘anxiety disorders’ and ‘depressive disorders’. The book also examines ‘attention deficit hyperactivity disorder’ (ADHD) which in the USA is seen as a health impairment and in England as an emotional, behavioural and social difficulty (Department for Education and Skills (DfES), 2001). These examples follow classifications used in the *Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Text Revision (DSM-IV-TR)* (American Psychiatric Association, 2000).

The classifications used in the present book are set out in Table 1, the list corresponding to the order in which the chapters are presented. The table gives equivalents of disorders and disabilities as they:

- are delineated in the present text
- might be categorised in the UK
- might be categorised in the USA.

Proposed readers

As part of ‘The Effective Teacher’s Guides’ series, readers of this book will include teachers and student teachers in mainstream and special schools, hospitals, psychiatric units and elsewhere. However, I hope that parents and non-teaching professionals with a role or an interest in special education will also find the book helpful.

Table 1 Broadly comparative terms

Text: Disruptive behaviour disorders (including conduct disorder)

UK: Behavioural, emotional and social difficulty

USA: Emotionally Disturbed

Text: Anxiety disorders and depressive disorders

UK: Behavioural, emotional and social difficulty

USA: Emotionally Disturbed

Text: Attention deficit hyperactivity disorder

UK: Behavioural, emotional and social difficulty

USA: Other Health Impaired

Outline of the remaining chapters

Chapter 2: Pedagogy

This chapter looks at pedagogies influential in educating pupils with emotional and behavioural disorders. Under behavioural approaches, I consider: learning theory through the work of Thorndyke on learning by trial and accidental success; classical conditioning through the work of Pavlov; conditioning emotional responses with reference to the early work of Watson; and operant conditioning through the work of B. F. Skinner. Next, the chapter looks at observational learning and modelling through Bandura's work and social cognitive theory. For both learning theory and observational learning, their relationship to special education and their scope are reviewed. I then consider applications of the approaches to elective mutism, phobia, and ADHD.

Chapter 3: Key perspectives

In this chapter I define and describe psychotherapy and its relationship to special education. I then explain various perspectives: systems, psychodynamic and cognitive-behavioural approaches. The chapter outlines each approach and considers its scope and relationship to special education.

Chapter 4: Disruptive behaviour disorders

This chapter considers oppositional defiant disorder briefly and then conduct disorder more fully. I comment on the criteria for conduct disorder and related issues. In examining interventions for disruptive behaviour disorders and implications for education, the chapter distinguishes approaches relevant for children and those for adolescents. Illustrative interventions are chosen that could be used in schools, could be used to complement school provision or which suggest schools could learn from the effectiveness of these interventions in reviewing their own provision. The question of medication is then considered. Finally, I summarise the aspects of provision in relation to curriculum and assessment, pedagogy, resources, therapy and care, and organisation.

Chapter 5: Anxiety disorders and depressive disorders

This chapter focuses on anxiety disorders (generalised anxiety disorder, obsessive-compulsive disorder, phobias, separation anxiety disorder, and

selective mutism), and on depressive disorders (major depressive disorder and dysthymic disorder). The final section seeks to summarise provision in relation to curriculum and assessment, pedagogy, resources, therapy/care, and organisation and other matters.

Chapter 6: Attention deficit hyperactivity disorder

This chapter outlines some of the debates currently relating to ADHD. It presents a definition of ADHD and considers its prevalence, and then looks at identification and assessment of the condition. The chapter outlines some of the other disorders with which ADHD co-occurs and causal factors. Turning to provision, it explains some of the main approaches, including behaviour management training, parent training, medication and educational approaches.

Chapter 7: Conclusion

The concluding chapter seeks to bring together some common threads of the book.

The book ends with a bibliography and a combined subject and author index.

Key texts

Farrell, M. (2009b) (4th edition) *The Special Education Handbook*, London, David Fulton

This book provides entries on various topics covering: special education issues and terms, disciplines associated with special education, venues relating to special education and school organisation, roles and responsibilities, individual differences among learners with disabilities and disorders, curriculum and assessment, resources and technology, pedagogy and classroom organisation, and therapy and care. It includes entries specific to emotional and behavioural disorders: anxiety disorders, ADHD, conduct disorders, depressive disorders, elective mutism, obsessive-compulsive disorder, oppositional defiant disorder, and phobias. Other relevant entries include various therapies, for example: behaviour therapy/behaviour therapist, cognitive-behavioural therapy/cognitive-behavioural therapist, drama therapy/drama therapist, play therapy/play therapist, and psychotherapy/psychotherapist.

Kauffman, J. M. and Hallahan, D. P. (2005) *Special Education: What It Is and Why We Need It*, Boston, MA, Pearson/Allyn and Bacon

This introductory but well argued book sets out the case for special education and explains some of its main features.

Reynolds, C. R. and Fletcher-Janzen, E. (eds) (2004) (2nd edition) *Concise Encyclopaedia of Special Education: A Reference for the Education of Handicapped and Other Exceptional Children and Adults*, Hoboken, NY, John Wiley and Sons

This reference work includes reviews of assessment instruments, biographies, teaching approaches, and overviews of learning disabilities.

Pedagogy

Introduction

This chapter looks at pedagogies that are very influential in educating pupils with emotional and behavioural disorders. In broad terms, the first of these pedagogies are behavioural approaches and the second concern observational learning and modelling.

Under the umbrella of behavioural approaches, I consider:

- learning theory through the work of Thorndyke on learning by trial and accidental success
- classical conditioning through the work of Pavlov
- conditioning emotional responses with reference to the early work of Watson
- operant conditioning through the work of B. F. Skinner.

Next, the chapter looks at observational learning and modelling through Bandura's work and social cognitive theory. For both learning theory and observational learning, their relationship to special education and their scope are reviewed. I then consider applications of the approaches to elective mutism, phobia, and attention deficit hyperactivity disorder. As work in this area is peppered with jargon and specific terminology, these terms are highlighted and explained as necessary for readers who may not be completely familiar with them.

This chapter draws on a related chapter in *Foundations of Special Education* (Farrell, 2009) where interested readers may find further detail.

Behavioural approaches

Learning by trial and accidental success

Early work on behaviour and learning was conducted by Thorndyke at the beginning of the twentieth century. It is sometimes described as learning by trial and error. In fact, it is more accurate to refer to learning by trial and accidental success because it is not the errors that lead to learning but the accidental stumbling on actions that lead to a positive outcome. Key terms in this work, as explained below, include ‘association’, ‘the law of effect’ and ‘the law of exercise’.

Thorndyke ([1911]/1965) describes experiments in which a cat is placed in a box. The animal can only get out by performing certain actions. For example, it might have to turn a wooden button to open a door on the box (p. 31). Thorndyke discovered that if the same cat was repeatedly returned to a box, it progressively took less time to get out to escape or to reach food. Eventually the cat could extricate itself immediately. It was hypothesised that the cat forms associations between the action leading to the door opening and getting out. Previous experience leads to the cat forming the associations quicker (p. 48).

A ‘law of effect’ was proposed. Part of this is, ‘Of several responses made to the same situation, those which are accompanied . . . by satisfaction to the animal will . . . be more firmly connected with the situation, so that, when it recurs, they will be more likely to recur’ (p. 244). Conversely, responses accompanied by discomfort will be only weakly connected with the situation so that, when the situation recurs, the response will be less likely to do so.

A further ‘law of exercise’ states that a response to a situation will be more strongly connected with it, ‘in proportion to the number of times it has been connected with that situation and to the average vigour and duration of the connections’ (p. 244). Thorndyke believed that these laws taken in conjunction with instinct could explain imitation in animals and humans (pp. 251–7). For him, learning involves making and rewarding connections between stimulus and response or avoiding and punishing such connections (p. 266).

Classical conditioning

In the 1920s and subsequently, Pavlov ([1926]/ 1960) carried out investigations into the physiology of the cerebral cortex in dogs. These studies included a series of experiments exploring what came to be called ‘classical

conditioning'. The terminology used in describing this work includes: 'reflex response', 'unconditioned stimulus', 'unconditioned response', 'conditioned stimulus', 'conditioned response' and 'extinction', and these are explained below.

A dog presented with food immediately begins to salivate. In classical conditioning terminology, it exhibits a salivation reflex response connected with digestion. The food was called the 'unconditioned stimulus' and the salivation was termed the 'unconditioned response' because they occurred naturally.

If the food was presented on several occasions accompanied by a sound such as a bell, the salivating reflex could subsequently be elicited using the sound of the bell alone. The animal salivated without the presence of food. In these circumstances, the bell was known as the 'conditioned stimulus' because the dog had learned to connect it with anticipated food. The salivation was called the 'conditioned response' because it occurred in response to a learned connection. This is a process of stimulus substitution. In this process, a stimulus, formerly neutral, acquires the power to elicit a response, which before was elicited by another stimulus. The change is brought about by the neutral stimulus being reinforced by the effective stimulus (Ibid. e.g. lectures 2 and 3 pp. 16–47).

Pavlov also studied the effect of different time intervals between the stimulus and the reinforcement, and the degree to which the properties of different stimuli could exert control. He examined the process of 'extinction' whereby the conditioned stimulus, when it is no longer reinforced, loses its power to evoke the response (Ibid. e.g. lecture 4, pp. 48–67).

Conditioned emotional responses

Conditioned emotional responses were studied by Watson and colleagues (Watson and Morgan, 1917; Watson and Rayner, 1920). Watson and Morgan theorised that original infant emotional reaction patterns are fear, rage and love. Later, mainly owing to conditioned reflex factors, an increasing range of stimuli elicits these emotions and combinations of them.

Watson and Rayner sought to demonstrate conditioned emotional responses through experiments on Albert B., an infant brought up mainly in a hospital environment (Ibid. p. 1). The experiments began when Albert was eight months old. He was shown various real animals and items, such as a white rat, a rabbit and cotton wool and indicated no fear of them. When the infant was nearly nine months old, the researchers established

that he showed fear when a noise, made by striking a hammer on a steel bar, was made outside his line of vision. When Albert was just over 11 months old, until when he was nearly 13 months old, Watson and Rayner sought to establish whether fear of an animal such as a white rat, could be conditioned by linking its presentation with striking the steel bar. After several pairings of Albert touching the rat and the noise, he became reluctant to touch the animal and eventually showed fear in its presence even in the absence of the noise. Some days later, when Albert was shown a white rabbit and it was placed in contact with him, he became frightened, suggesting transference of the appearance and the touch of the rabbit and the rat.

Watson and Rayner suggest many phobias are direct or transferred conditioned emotional reactions (Ibid. p. 14). However, there were certain methodological flaws in the experiments. For example, fear responses apparently generalised to associated items were sometimes ‘topped up’ by being conditioned directly (see also Harris, 1979). This casts doubt on a straightforward interpretation suggested by Watson and Rayner.

Operant conditioning

In animal experiments, Skinner ([1953]/ 1965) demonstrated ‘operant conditioning’. This work involves terms such as: ‘operants’, ‘reinforcement’, ‘generalised reinforcement’, ‘differential reinforcement’, ‘positive reinforcement’, ‘negative reinforcement’, ‘shaping’, ‘schedules of reinforcement’, ‘discrimination’ and ‘punishment’. These are explained in the remainder of this section.

Operant conditioning, reinforcement and discrimination

In operant conditioning, learning can occur if the researcher identifies a desired learning outcome and the animal is rewarded for behaviours (operants) progressively approximating the target behaviour (Ibid. pp. 62–6, p. 90).

Rats are trained using a cage with a lever and a food trough. A target learning outcome is decided on – for example, it might be for the rat to depress the lever. This outcome is broken into smaller components called ‘operants’. Importantly, ‘operant behaviour . . . is *emitted*, rather than *elicited*’ (p. 107, italics in original). The operants might be:

- the rat spontaneously (and fortuitously) turns towards the lever
- the rat approaches the lever

- the rat touches the lever
- the rat presses the lever.

Initially if the rat approaches the lever a food pellet (the reward or reinforcement) is released into the trough. This behaviour is rewarded until it is consolidated. Later, the food pellet is only delivered if the rat touches the lever. Subsequently, food appears only if the animal presses the lever. The process of rewarding successive approximations towards the target behaviour is called ‘shaping’ (Ibid. p. 92). Skinner later discovered that shaping is more effective if the reward follows several correct responses rather than every correct one. Such findings led to the development of schedules of reinforcement.

The behaviour of a pigeon stretching its neck might be reinforced by a light being switched on. As Skinner explains, ‘The stimulus (the light) is the occasion upon which a response (stretching the neck) is followed by a reinforcement (the food)’ (p.108). Eventually the response is more likely to occur when the light is on, through a process of ‘discrimination’ (p. 108). The researcher can then alter the probability of a response by presenting or removing the discriminative stimulus. In this way, the discriminative stimulus alters the probability of the occurrence of a response (p. 110).

Positive reinforcement, negative reinforcement, and punishment

Distinctions are made between ‘positive reinforcement’, ‘negative reinforcement’ and ‘punishment’. Because positive reinforcement is associated with what amounts to reward, it may easily be assumed that ‘negative reinforcement’ concerns sanctions. For this reason, it is easy to confuse ‘negative reinforcement’ and ‘punishment’ although they refer in Skinner’s terminology to quite different things. To further add to potential confusion, Skinner uses the expression ‘punishment’ in a particular way.

In *positive* reinforcement, a ‘correct’ response is followed by a reward and therefore is reinforced.

In *negative* reinforcement, an unpleasant stimulus is removed to reinforce behaviour; that is, it involves the presence of an unpleasant stimulus and then its removal when the required behaviour is produced (Ibid. p.73).

Punishment in everyday usage usually implies that something unpleasant happens to an individual. For Skinner, the term is extended to include not only unpleasant stimuli, but also the removal of a pleasant stimulus.

Accordingly, punishment involves the presentation of an adverse stimulus or the removal of a pleasant stimulus to discourage certain behaviour (pp. 182–93).

Consider an example in which punishment consists of the presentation of an aversive stimulus. If a particular response is followed by an aversive stimulus, any stimulus accompanying the response will be conditioned, becoming an ‘aversive stimulus’ (p. 188).

A child on seeing a hot stove may approach it and try to touch. In Skinner’s terms, the child is exhibiting a response of approaching the stove. The child does not know the stove could burn him and his approach towards the stove is not affected by any adverse associations. The protective parent shouts at the child and startles him, which in normal circumstances is likely to constitute an adverse stimulus. This adverse stimulus of shouting, if effective, will discourage the child’s unwanted response of approaching the hot stove. Approaching the stove will become conditioned to be an aversive stimulus. The child will therefore tend not to approach the stove because this behaviour has become conditioned as aversive. The child therefore needs to be able to do something else to avoid approaching the stove, for example moving away from the stove. In summary, an effect of punishment is to ‘establish aversive conditions which are avoided by any behaviour of ‘doing something else’ (p. 189).

An individual can also be punished for not doing something (pp. 189–90). A similar explanation appears to be possible to explain where such punishment is effective. The individual is punished for not doing something – for example, a pupil is given a period of detention or removal from leisure activities because he has not handed in a piece of homework. The punishment can be avoided in the future by doing something else, in this case doing the required homework. Consequently the behaviour of doing the homework is reinforced. An aversive condition is established which is avoided by ‘doing something else’.

Other aspects of reinforcement

A distinction is made between a primary reinforcer and a conditioned reinforcer. Primary reinforcers include food, water, sexual contact and escape from injurious conditions (p. 83). Conditioned reinforcers involve the pairing of a stimulus that is reinforcing with one that initially is not, so that the non-reinforcing stimulus becomes reinforcing. This is concerned not with eliciting a response but with reinforcing it (p. 76). When a hungry pigeon is fed, the food pellet is a primary reinforcer and can be used to reinforce certain behaviours or ‘operants’. If a hungry

pigeon is fed every time a light is switched on, the light will eventually become a conditioned reinforcer able to condition an 'operant' in the same way as food.

The frequency of a particular behaviour can be reduced or the behaviour can be eliminated if another behaviour incompatible with it is reinforced. Assuming that, usually, sociable behaviour and withdrawn behaviour are opposites and are incompatible, sociable behaviour might be reinforced to reduce the incidence of withdrawn behaviour (Ibid. p. 192). Extinction occurs when the behaviour is no longer reinforced and gradually fades.

Generalised reinforcement occurs when a conditioned reinforcer is paired with more than one primary reinforcer. If money or tokens are the reinforcer, subsequent control of behaviour relates to these reinforcers. It is relatively independent of passing deprivations such as lack of food. Skinner suggests that we are reinforced irrespective of any deprivation when we successfully control the physical environment (Ibid. p. 77). He maintains, 'Eventually, generalised reinforcers are effective even though the primary reinforcers upon which they are based no longer accompany them' (Ibid. p. 81). An example is approval for its own sake. The reinforcement of responses 'increases the probability of all responses containing the same elements' (Ibid. p. 94).

Differential reinforcement involves the reinforcing of certain behaviours, not others. It has the effect of increasing the frequency of the reinforced behaviour (Ibid. pp. 95–8). Intermittent reinforcement is of various types – for example, interval and ratio reinforcement. Interval reinforcement involves reinforcing behaviour at regular intervals, say every minute (Ibid. pp. 100–2). In ratio reinforcement, the schedule of reinforcement depends on the manifestation of the behaviour. For example, in fixed ratio reinforcement every twentieth occurrence of a specified behaviour may be reinforced (Ibid. p. 102).

The way in which reinforcement is applied is referred to as 'schedules of reinforcement'.

Schedules may combine interval and ratio reinforcement, so reinforcement is determined by both passage of time and 'the number of unreinforced responses emitted' (Ibid. p.105). (See also Pierce and Cheney, 2008).

Evaluation of behavioural approaches

Although I have provided one or two examples of how the principles underpinning the behavioural approaches described might apply to school

pupils, it will be apparent that the experimental work provided so far mainly concerns the application of behavioural approaches to animals. The exception is the controversial single case study involving Albert B. Naturally it cannot be assumed that such approaches apply to children and adults.

However, examples provided later indicate that in some circumstances approaches derived from such early work are effective in modifying the behaviour and assisting the learning of some children. The wide research base supporting this is so well established that reviews and evaluations done decades ago tend to stand. The review examples that follow might help to illustrate this.

- Rutherford and Polsgrove (1981) reviewed the use of behaviour contracts with 'behaviourally disordered and delinquent' children and young people.
- Litow and Pumroy (1975) analysed classroom group contingencies.
- Rutherford and Nelson (1982) reviewed the literature on the use of time out for 'behaviourally disordered' pupils in classrooms.
- Walker (1983) considered response cost in school settings.
- Whitaker (1996) looked at schedules of differential reinforcement in relation to a person's degree of intellectual disability.
- O'Leary and Drabman (1971) reviewed token economies in the classroom. (Token economy systems involve the use of tokens that are awarded for desired behaviour or deducted for unwanted behaviour and can be cashed in at certain times for a menu of rewards such as trips or toys.)

Reservations remain however. There are difficulties generalising behaviour once it has been learned in a particular setting. For example, behavioural methods such as a token economy system may be used to help a child learn social skills in a residential school. Where such methods used to encourage the behaviour cease to be used, the behaviour may not persist. Therefore, in a different setting such as the child's home, where such methods may not be practicable, the new behaviour may not continue.

Attempts have been made to avoid such failures of generalisation. Efforts can be made to reinforce behaviour by naturally occurring rewards such as praise, which can be offered in many settings. Nevertheless, it is rare for stimulus and response generalisation to be built into a programme of intervention (Rutherford and Nelson, 1988). Also, in practice, behavioural approaches may be combined with other strategies such as cognitive interventions where the child's ways of thinking are challenged.

Observational learning and modelling

Social learning theory and social cognitive theory

In *Social Learning Theory* Bandura (1977) sets out a theory of learning focusing on cognitive processes in which observational learning is important. An individual's perceived self-efficacy is important too. This is the belief that he is able to influence or control his behaviour or outcomes and can affect behaviour, motivation, thinking, feelings and performance.

Later, in *Social Foundations of Thought and Action* Bandura (1986) sets much of this in the context of what he calls a 'social cognitive theory' (which is the book's subtitle). In considering observational learning and modelling in this chapter, I refer largely to this second book. However, readers may find these concepts and applications referred to elsewhere as aspects of 'social learning theory' – for example, Ayers and Prytys (2002, p. 197–8) use this terminology.

Bandura (1986) recognised the limitations of trying to explain complex behaviour solely in terms of conditioning (Ibid. pp. 12–18). Complex behaviours are acquired faster than would be expected if conditioning were the only explanation. Also, common experience suggests that observation is an important aid to learning. Taking a social cognitive perspective, Bandura sets out a theoretical framework for analysing motivation, thought and action. Three aspects all play their part and interact with one another (Ibid. p. 51):

- behaviour
- personal features including cognitive ones
- the environment.

Bandura's states: 'behaviour, cognitive and other personal factors, and environmental influences all operate interactively as determinants of each other' (Ibid. p.23). While he refers to the model as one of 'reciprocal determinism' (Ibid. p. 23), determinism in this context has a circumscribed meaning. It indicates 'the production of effects by certain factors'. It does not necessarily imply 'actions being completely determined by a prior sequence of causes operating independently of the individual' (Ibid. pp. 23–4).

Processes in observational learning and modelling

Within social cognitive theory, observational learning is important. Four 'constituent processes' govern such learning (Ibid. p.51):

- attentional processes
- retention processes
- production processes
- motivational processes.

Briefly, observational learning is influenced by the attention of the learners, how representations of observations are retained, how behaviours are produced, and how the learner is motivated.

Among factors influencing attentional processes are: a person's cognitive skills and other attributes of the observer, and the properties of the modelled activities, for example, their complexity (Ibid. pp. 51–5). A model that is more attractive or interesting to the observer is likely to gain greater attention.

Retention processes involve the observed behaviour being retained in symbolic form so that it can be drawn on in the future (Ibid. pp. 55–63). This implies the learner transforming what is observed into pertinent symbols to capture the 'essential features and structures' of the modelled activities (Ibid. p.56). Representation may be in words or images. Rehearsal of what has been observed, either by action or through cognitive rehearsal, augments learning and retention.

Production processes (Ibid. pp. 63–8) involve 'converting the symbolic conceptions into appropriate actions' (Ibid. p.63). Most modelled activities are represented as conceptions and rules of action. Consequently, producing behaviour involves organising responses temporally and spatially in compliance with these conceptions. Feedback through corrective modelling can help the learner achieve the desired standard of performance in the activity. This principle is used extensively in sports training.

Motivational processes (Ibid. pp. 68–9) influence the performance of observationally learned behaviour through 'direct, vicarious and self produced' incentives (Ibid. p. 68). Individuals are more likely to produce modelled behaviour if it results in positive outcomes than if it leads to negative ones. Similarly, observed outcomes for other people affects learners' behaviours as they vicariously experience the consequences. An individual's personal standards of behaviour act as motivator.

Bandura (1986) maintains that most human behaviour is learned by observation through modelling. He stresses that modelling is not mere

imitation. We observe others and in doing so form rules of behaviour as a form of coded information. At a later time, this coded information acts as a 'guide for action' (Ibid. p. 27). Words and images are vehicles of modelling as symbolic models and '... modeling can transmit simultaneously knowledge of wide applicability to vast numbers of people through the medium of symbolic models' (Ibid. p. 47).

Also, in skill acquisition, modelling is better regarded as learning rules rather than as 'response mimicry' (Ibid. p. 48). The breadth of the influence of modelling is made clear. Bandura (1986) argues that, 'Powerful modeling influences can simultaneously change observers' behaviour, thought patterns, emotional reactions, and evaluation' (Ibid. p. 48). Also, modelling influences can have many effects. They can be 'instructors, inhibitors, disinhibitors, facilitators, stimulus enhancers, and emotional arousers' (Ibid. p. 50).

Evaluation of social cognitive theory

Social cognitive theory appears to address the perceived limitations of some behavioural approaches. The stress on observational learning accords with common experience but the approach refines common observation so that social cognitive theory leads to potential interventions that can be evaluated.

Among considerations relating to social cognitive theory is that modelling tends to influence behaviour where the child identifies with the person being observed. This identification cannot be guaranteed in interventions. The child may also be modelling his behaviour on others whose behaviour is not what is intended by the intervention. For example, a young person with conduct disorder may have for years modelled his behaviour on an abusing father whom he admires. Interventions may involve encouraging him to observe and hopefully model new behaviour on a youth worker, teacher or other adult. But the young person may not admire or have any feelings of attachment to the model. It may take a long time before any such relationship forms. Without this the efficacy of observational learning is likely to be reduced.

Furthermore, interventions have been developed to encourage self-control through group cognitive-behavioural self-control training and other methods. These appear to be beneficial in the settings in which they are developed and applied. However, the benefits do not always generalise to other settings.

Learning theory and observational learning and emotional and behavioural disorders

Learning theory

If one seeks to extend learning theory too widely in special education, its limitations become apparent. Learning theory strives to be scientific and observational and tends to focus on behaviour, avoiding purported inner states and cognition. This appears to be a limited view of the complexities of human life and learning. For example, Skinner's (1957) attempts to explain language acquisition by reference to operant conditioning, chaining and related factors was convincingly criticised by Chomsky (1959).

On the other hand behavioural strategies underpinned by learning theory are effective in many settings. For example, token economy systems are used for some children with disorders of conduct. Also, the contribution of the behavioural elements in the development of cognitive-behavioural approaches and psychotherapy are extensive, recognising the importance of changing behaviour as well as working on supposed cognitions. This is widely recognised as a strong and cost-effective strategy.

Perhaps the most conspicuous legacy of Skinner and others is the modern-day use of applied behaviour analysis. These elements are also described in terms of functional assessment and functional analysis. The approach typically involves various elements (Arthur-Kelly, Lyons, Butterfield and Gordon, 2007, Chapter 8). The teacher has to observe, carefully define and measure behaviour. The target behaviour (the behaviour the educator is aiming to change) has to be precisely defined. This helps ensure consistency in observations when interventions are tried and further observations are made to see if the target behaviour is increasing or decreasing. An unwanted target behaviour might be a pupil persistently spitting on the classroom floor, or moving around the class without permission and touching other pupils. A desired target behaviour might be the pupil sitting quietly in his own seat. An ABC record may be made of the antecedents (A) to the target behaviour, the behaviour itself (B) and its consequences (C).

The teacher (or school psychologist) takes a baseline measure of the behaviour it is desired to change. This provides a basis on which to judge the effectiveness of interventions. The baseline might include measures of the frequency and duration of the behaviour as well as other measures (Alberto and Troutman, 2005). The educator then identifies the range of reinforcers that are likely to be effective in modifying the behaviour. These

may be positive ones such as praise, a token, food, or a favourite activity. The reinforcers might be negative, such as detention.

Crucially, the reinforcement must be immediate, contingent on the pupil's behaviour, and motivating (Arthur-Kelly, Lyons, Butterfield and Gordon, 2007, Chapter 8). A schedule of reinforcement will be devised which might involve reinforcing the behaviour every time it occurs initially, then gradually reducing the frequency of reinforcements as the behaviour is modified.

You will remember the potential difficulties of generalising the desired behaviours once they have been learned in a particular setting. To try to avoid poor generalisation, you can build in to the programme ways of eventually replacing the more artificial reinforcers with naturally occurring ones such as praise. The teacher can ensure these naturally occurring reinforcers are given with the artificial reinforcers. This helps ensure the two become paired and the behaviour eventually becomes sustained by the natural reinforcer once the artificial one is no longer used.

Among strategies for increasing desirable behaviour are:

- shaping
- negative reinforcement
- token economies (where tokens are given as immediate reinforcement that can be later traded for rewards)
- contracts.

Strategies to reduce unwanted behaviour include (Arthur-Kelly, Lyons, Butterfield and Gordon, 2007, Chapter 8):

- reinforcing behaviour that is incompatible with the unwanted behaviour (rewarding sitting down if the aim is to reduce out of seat behaviour)
- extinction (e.g. ignoring the unwanted behaviour)
- over correction (including restitutional over correction in which the student puts something right that he has damaged or done wrongly)
- response cost (e.g. losing points in a token economy system)
- time out (removing the opportunity of the reinforcement of unwanted behaviour).

Among adaptations of applied behaviour analysis are cognitive-behavioural approaches

(Kaplan and Carter, 1995). In classroom terms these might imply both using behavioural methods to shape behaviour as well as encouraging students to use strategies such as anger management and self-instruction.

Another application is functional analysis and assessment (Larson and Maag, 1998; Reid, and Maag, 1998). This involves establishing the goal for the student of any unwanted behaviour and seeking to enable the student to reach the same goal without exhibiting the behaviour. If the student misbehaves to get attention from the teacher, the teacher will try to find ways of giving the student the attention that do not involve unwanted behaviour. Often the situation is more complex. Therefore, it is necessary to make a careful analysis of the context in which the behaviour occurs as well as examining what might be the triggers for the unwanted behaviour. The teacher tries and assesses adjustments to the context and management of the possible triggers to see if they are having a positive effect on behaviour. This method has been used with students with very challenging behaviour (Sigafoos, Arthur and O'Reilly, 2003).

Observational learning

Observational learning, and modelling, in the context of social cognitive theory address some of the perceived limitations of a more constrained learning theory. It does so in two ways. First, it takes into greater account observational learning functioning as a force in its own right. Second, it is partly explainable by learning theory. The social and cognitive context of learning and behaviour is taken into greater account and used to change behaviour and enhance learning.

The contribution of this approach is reported across areas of special education and general education (Farrell, 2008). For example, role-play is used to encourage better communication skills or ways of dealing with anger.

Elective mutism, phobia, and attention deficit hyperactivity disorder

The section below considers examples of the use of learning theory and to a lesser extent observational learning. I examine elective mutism, phobia, and attention deficit hyperactivity disorder.

Elective mutism

Elective mutism (selective mutism) has been defined as a ‘persistent failure to speak in specific social situations . . . where speaking is expected, despite speaking in other situations’ (American Psychiatric Association, 2000, p.125–7). The child might not speak at school and might speak at home.

Elective mutism responds to family-based behavioural treatment (Carr, 2006). This typically involves the child and a family member, with whom the child will speak, having planned conversations in a venue where the child is usually mute, such as the school classroom. Let us assume the family member is the child’s mother. Initially, these conversations might take place in the classroom when it is empty. Over a period of time, people in whose presence the child does not usually speak in that setting join the child and family member. These are likely to be other school pupils and the teacher. As the child becomes increasingly able to continue conversation with his mother in the presence of these others, the teacher and pupils gradually participate in the conversation. Eventually, the child and his mother move further apart until the child is conversing with others in the classroom with the family member positioned by the classroom door. Finally, when the child feels ready he asks his mother to leave and collect him after school (Ibid. p.521). (See also Sage and Sluckin, 2004).

Phobias

Types of phobia include specific phobia, for example claustrophobia, and social phobia (American Psychiatric Association, 2000).

- A *specific phobia* is a persistent unreasonable fear of certain situations, activities or objects leading to their avoidance.
- *Social phobia* is a marked, persistent, unreasonable fear of social situations or performance situations where the child may be embarrassed (Ibid. p.450).

Behavioural interventions can be effective for many phobic children (Ollendick and King (1998) provide a review). Treatments of discrete phobias may use desensitisation. This can involve images of what is feared or *in vivo* treatment using the real feared item or situation. School refusal has been effectively treated by ‘flooding’. This involves encouraging the child to quickly confront fears by quickly returning him to school. However, there is ethical debate about such interventions (Fonagy *et al.*, 2002, p. 87).

Operant conditioning-related contingency management has been effective with young children with phobias (Menzies and Clarke, 1993). One study comprised mainly school refusers of secondary school age. The impact of behavioural treatment was compared with home tutoring and inpatient treatment. Behavioural treatment led to significantly better rates of maintenance in school than home tutoring or inpatient treatment (Blagg and Yule, 1984).

Turning to social learning theory, childhood phobias have been effectively treated through modelling (Bandura, 1977). Participant modelling has been used involving *in vivo* exposure and the modelling of exposure by others (Blanchard, 1970).

Attention deficit hyperactivity disorder

For attention deficit hyperactivity disorder, a widely discussed and extensively used intervention is psychostimulants, such as methylphenidate, known as Ritalin. Behavioural interventions are also used but on their own they appear to be less effective than stimulant medication alone. But behavioural methods enable the dose of medication to be reduced while maintaining similar improvements.

The effects of behaviour management training and the psychostimulant methylphenidate were tested as single and combined treatments in relation to the classroom performance of children with attention deficit hyperactivity disorder. Performance was defined in relation to classroom behaviour, accuracy and academic productivity (Carlson, Pelham, Milich and Dixon, 1992). An eight-week programme involved 24 boys aged 6 to 12 years. The research design crossed two doses of methylphenidate with two classroom settings. The two doses were:

- 0.3 mg
- 0.6 mg.

The two settings were:

- behaviour modification (token economy, time out and home report card)
- no behaviour modification.

A combination of behaviour modification and 0.3 mg of methylphenidate provided maximal behaviour modification, nearly as much as 0.6 mg of methylphenidate alone.

Response cost can be effective with attention deficit hyperactivity disorder and has been incorporated into an attention training system. This is a battery-operated feedback module placed on the child's desk, displaying the running total of points earned by a child in a specified period. For each minute the child is on task, a point is added. But each time the teacher sees the child off task she presses a remote control button illuminating a red light on the module. This alerts the child that a point has been deducted. At the end of the agreed period, the points are totalled and converted to a reward.

Behaviour management techniques can be linked to the implications of functional behavioural assessment. Let us assume a pupil regularly produces a product in art lessons that is well below what he could achieve. A functional behavioural analysis may suggest the function of this poor work is to enable the child to finish the task quickly to be able to physically move to other activities. In response the environment might be modified to enable better work. The teacher might agree with the pupil that the work be completed in two phases with a brief recess. This would be monitored to ensure the objective was reached, thereby confirming or disconfirming the hypothesis.

With many behavioural approaches, there are ways to improve generalisation. These include booster sessions and the reinforced opportunity to use the skills in the necessary setting. Also, schedules of reinforcement can be gradually changed towards the natural reinforcement found in the classroom. For example, the teacher might move from using tokens or tangible rewards to using teacher praise.

Conclusion

Behavioural approaches and observational learning and modelling are influential in educating pupils with emotional and behavioural disorders.

Behavioural approaches draw on learning theory through the work of Thorndyke on learning by trial and accidental success; classical conditioning through the work of Pavlov; conditioning emotional responses with reference to the early work of Watson; and operant conditioning through the work of B. F. Skinner. Observational learning and modelling relates to Bandura's work and social cognitive theory. The early work on behavioural theory involved mainly animal experiments and it is not a straightforward matter to assume that the indications from these experiments apply to children and adults. In fact, there is extensive evidence of the effectiveness of behavioural methods in changing the behaviour of children and young people with emotional and behavioural disorders. A

continuing difficulty is encouraging the generalisation of new learned behaviour to settings different to the one in which they were acquired.

With regard to observational learning, the application to children and adults is more straightforward. Nevertheless, applications have their limitations. For example, modelling is influenced by the view the child has of the person on whom it is hoped the modelling will take place. Where a child tends to model his behaviour on bad examples – for example, in a violent home environment – it is by no means easy to counter this with occasional role-play with teachers and others whom the child may not identify with.

Encouraging applications are to be found, however, with regard to many emotional and behavioural difficulties, including elective mutism, phobia, and attention deficit hyperactivity disorder.

Thinking points

Readers may wish to consider the extent to which:

- behavioural theory and approaches can contribute to provision for different types of emotional and behavioural disorders
- observational learning theory and approaches can contribute to provision for different types of emotional and behavioural disorders.

Key texts

Alberto, P. A. and Troutman, A. C. (2005) (7th edition) *Applied Behavioural Analysis for Teachers*, Columbus, OH, Merrill/ Prentice Hall

A practical book covering the concepts and techniques of behaviour management. It includes: identifying the target behaviour, collecting and presenting behaviour data, functional assessment, experimental design, arranging antecedents and consequences, generalising changes in behaviour, and ethical issues.

Arthur-Kelly, M., Lyons, G., Butterfield, N. and Gordon, C. (2007) (2nd edition) *Classroom Management: Creating Positive Learning Environments*, Melbourne, Australia, Thompson Learning

This book sets out an integrated model of classroom management involving ecological, preventative and interventionist perspectives. Preventative practices include the curriculum, teaching, communication and classroom organisation. Psychosocial and behavioural interventions

are considered. Chapter 8 concerns 'Intervening Using Behavioural Strategies'.

Gabriels, R. and Hill, D. E. (2007) *Growing Up with Autism: Working with School Age Children and Adolescents*, New York, Guilford Press

Offers guidance for supporting positive behaviour, social skills and communication and dealing with issues of mental and physical health and sexuality.

Hersen, M. (ed) (2002) *Clinical Behaviour Therapy: Adults and Children*, Hoboken, NY, John Wiley and Sons

Intended mainly as a casebook in the training of clinical professionals.

Kazdin, A. E. (2001) (5th edition) *Behavior Modification in Applied Settings*, Pacific Grove, CA: Brooks/ Cole

Sets out behaviour modification principles and how they can apply in school, the home and clinic as well as at work. It draws on both applied research approaches and clinical intervention techniques.

Nelson, W. M., Finch, A. J. and Hart, K. J. (eds) (2006) *Conduct Disorders: A Practitioner's Guide to Comparative Treatment*, New York, Springer

Provides a broad picture of approaches and models used with conduct disorder. Chapters include psychoanalytical approaches to treatment; family therapy; cognitive-developmental psychotherapy; behavioural treatment; cognitive-behavioural psychotherapy; multi-systemic therapy; continuum of residential treatment care; and comparative treatments.

Pierce, W. D. and Cheney, C. D. (2008) (4th edition) *Behaviour Analysis and Learning*, New York, Psychology Press

Covers the principles of behavioural analysis and learned behaviour and includes chapters on 'applied behaviour analysis' and 'verbal behaviour'.

Key perspectives

Introduction

In understanding and providing therapy and suitable educational approaches for pupils with emotional and behavioural disorders, certain perspectives are important: systems, psychodynamic and cognitive-behavioural approaches. This chapter outlines each of these approaches and considers its scope and relationship to special education. First, however, I define and describe psychotherapy and its relationship to special education. The chapter draws on a related chapter in *Foundations of Special Education* (Farrell, 2009) where interested readers may find further detail.

Psychotherapy and special education

Psychotherapy concerns planned techniques, therapist qualifications and client outcomes, and has been described as: ‘the informed and playful application of techniques derived from established psychological principles’ (Meltzoff and Kornreich, 1970). Therapists are individuals trained and experienced to understand these psychological principles and to apply the related techniques. Where the therapist identifies certain personal characteristics as ‘maladaptive or maladjustive’, she aims to modify these ‘feelings, values, attitudes and behaviours’ (Ibid.).

Different types of psychotherapy, for example ‘behavioural therapy’ or ‘psychodynamic psychotherapy’, can be understood in terms of several key features (Gurman and Messer, 2005, pp. 4–20):

- the concept of personality that is implied or understood
- psychological health and pathology
- the process of clinical assessment

- the practice of therapy
- the therapeutic relationship and the stance of the therapist
- curative factors or mechanisms of change
- treatment applicability and ethical considerations
- support for the therapy provided by research.

While there are numerous approaches deemed psychotherapies, many are minor variations on already developed techniques. About a dozen distinctive approaches can be identified (Ibid. p. 1). If one is to focus on psychotherapies reflecting a particular view of human nature, the number decreases further. For example, one would not include ‘brief psychotherapy’ because this only describes the shorter than usual time-span of the intervention and may be informed by different perspectives.

Provision for special children aims to encourage educational progress and personal and social development (Farrell, 2003 *passim*). If a pupil is receiving psychotherapy, where the school is aware of the aims of the therapy and its potential contribution to the child’s ultimate well-being, educators, therapists and other professionals can work towards similar goals. Therapists and other staff working with special children need to liaise with each other, sharing information as necessary about progress or concerns. The therapist can do so in a general sense without compromising the confidentiality of the therapy sessions.

School administrators and managers will ensure that timetabling and day-to-day organisation includes time for therapy sessions to take place. The transition from therapy session to classroom and from class to therapy session may need careful handling, as the expectations in each setting are different, making it potentially difficult for a child to switch from one to the other. Where the child has been dealing with intense feelings and issues in therapy sessions, the return to regular classroom routine may be difficult.

To help this, there may be a transition period after psychotherapy and before the child rejoins his class group. Where therapy occurs on the school site the therapist may collect the child from the classroom and return him there at the end of the session. Where the pupil travels to therapy sessions from school, his escort will need to be sensitive to the transition.

Although distinctive approaches to psychotherapy are used, combined approaches have been tried with adolescents with conduct disorder and may bring together several interventions in a multiple-level package. An example is ‘multi-systemic therapy’, a promising home-based intervention for serious young offenders provided by a single therapist. It uses various

techniques as deemed necessary, such as family therapy, parent training, and behavioural and cognitive approaches. With delinquent adolescents, it has reduced recidivism and improved both family and individual pathology (Borduin, 1999). Reviews suggest that for young delinquents it tends to reduce time spent in institutions and frequency of arrests (Wolfenden *et al.*, 2003).

Three approaches

Some distinctive approaches such as ‘systems’, ‘psychodynamic’, ‘cognitive’ and ‘behavioural’ imply foundational views of human personality, behaviour and interaction. Reinecke and Freeman (2003) suggest that behavioural, psychodynamic and systemic models of psychotherapy and cognitive therapy each represent not so much a single theory but a ‘school of thought’ (Ibid. p. 229). Cognitive-behavioural approaches have been described as ‘hybrids of behavioural strategies and cognitive processes’ (Dobson and Dozoiz, 2001, p. 11–12) and might be seen as relating to both behavioural and cognitive ‘schools of thought’.

This chapter focuses on three perspectives:

- systems
- psychodynamic
- cognitive-behavioural.

Systems approach

A systems perspective reflects ‘a view of behaviour which takes account of the context in which it occurs’ (Dowling and Osborne, 1994, p. 3). It is an approach to family therapy and also provides insights into the way in which one might understand and respond to a school and a child’s family as systems. This section therefore considers:

- functional family therapy
- the family and the school as systems
- a joint systems approach involving family and school
- relationships between systems perspectives and special education.

Functional family therapy

Family therapy refers to approaches to group therapy in which the therapist sees all family members at the same session (Dallo and Draper,

2000). In a systems approach to family therapy (Gurman and Messer, 2005, pp. 400–62), a problem apparently located in a family member (for example a child apparently with some psychosocial disorder) may be re-examined and be seen to exist within the family as a whole. Members of the family are enabled to communicate with one another and seek solutions to the problem, as they perceive it. The therapist may put forward various strategies to encourage family members to behave, think and feel differently.

Functional Family Therapy (Alexander and Parsons, 1982) is a systems approach, which also draws on learning theory and cognitive theory. It creates a non-judgemental environment in which explanations are built up about the interactional function of the behaviour of all family members. It seeks to help clients understand the role of their behaviour in regulating family relationships, allowing family members to modify their expectations, attitudes, beliefs and emotions, and empowering them to feel more capable of making changes. Behaviours, certain expressions of which may be problematic, are considered to fulfil particular outcomes: contact/closeness (merging); distance/independence (separating), or vacillation between the two (midpointing). The steps of the process of functional family therapy are:

1. assessment
2. therapy
3. education.

During assessment, levels of family functioning are evaluated. These allow the therapist to identify in which family interactions the problem behaviours are embedded, and what functions are served by the behaviours. In the therapy phase, interventions are employed to try to deal with family resistances, and encourage family members to change. Reattribution techniques may be used to encourage members of the family to re-examine their understandings of the way the family interacts and the problem as it presents itself. In the education aspect, the therapist may introduce contingency management, modelling, and problem-solving training (Alexander *et al.*, 2000). (For a fuller account see Gurman and Messer (2005, pp.441–2).

Functional Family Therapy has been used with delinquents (Alexander *et al.* 1988), seeing an adolescent's difficult behaviour as serving a function, such as regulating the distance between family members. Intervention seeks not only to tackle the adolescent's behavioural problems and cognitive dysfunction, but also to address family interactions. It aims to

change patterns of interaction and communication to encourage adaptive family functioning.

Family and school as systems

A systems view of a child's family and school may inform approaches to children who appear to experience psychosocial disorders. The child's school may be regarded as a system in which a child can be envisaged as 'having' a problem but where the problem may also be understood in relation to the school as a whole.

A linear model of behaviour seeks a rationale to explain the apparent causes and effects of behaviour, which it regards as an individual phenomenon. By contrast, a systems approach sees behaviour as existing within a context and takes an interactional and holistic view. It is suggested that through circular causality, sequences of interactions contribute to the continuation of a 'problem'. Consequently, asking *how* a problem arises becomes more relevant than enquiring *why* it happens (Dowling and Osborne, 1994, p. 5). If a parent, sibling or teacher decides to 'punctuate' the circle of interaction by focusing on a point in the cycle, this can give a possibly spurious impression of a linear cause and effect.

A cycle of interaction might perpetuate regular conflict between a particular pupil and a certain teacher. The teacher may punctuate the circle at the point of a pupil's perceived rude and unco-operative behaviour in the classroom, seeing the problem as residing predominantly within the pupil. The pupil may punctuate the circle at the point of the teacher's perceived negative and demeaning attitude towards him, seeing the situation as being largely precipitated by the teacher. Neither pupil nor teacher is 'correct' in their interpretation in any absolute sense, there being no absolute perspective from which behaviour can be viewed and evaluated.

It is important that the system is coherent and that its pieces fit so as to be internally and externally balanced in relation to the environment. In a school system, there may be self-regulating aspects of dysfunctional individual behaviour, so components of the school system may sustain the unacceptable conduct. Recognising this may lead to modifying elements of routine and procedure so the school's aims are fulfilled without sustaining conflict with a pupil. The 'reciprocal influence' of the family and school, which are closely interlinked over a long period, determines how the two systems view one another. Neither can be viewed 'without reference to their influence on the environment in which they exist' (Ibid. p.6).

A joint systems approach involving family and school

Among the common elements that it has been suggested school and family share are:

- hierarchical organisation
- rules
- culture (including the ethos of an organisation)
- belief systems.

In the hierarchical organisation of the family it is important that there is a responsible adult in charge, setting and communicating consistent rules to children, helping them feel secure and able to understand the consequences of breaking rules. School hierarchy and related organisational structure may influence a pupil's perception and behaviour so that he is seen as problematical to those seeking to maintain the structure (Ibid. p. 8). School rules tend to be public, explicit, and the subject of whole-school policies, while family rules may not be as explicitly stated. School culture relates to its ethos, subtly conveyed in the way things are done, and in the family too there is a culture and an implicit expectation that things are done in a particular way. Belief systems include the explicit and implicit beliefs and values influencing daily interaction and behaviour. They apply in both school and family, although the particular beliefs and values may differ.

A 'joint systems approach' seeks to understand the child's family and the school as systems and explores ways of taking into account inter-relationships between them (Dowling and Osborne, 1994, *passim*). The aims of a joint systems approach to family and school are:

- facilitating communication between school, staff and family members
- clarifying differences in perceptions of the problem by focusing on how it occurs rather than on why it happens
- negotiating commonly agreed goals
- beginning to explore specific steps towards change (Ibid. p. 15).

Systems perspectives and special education

A systems perspective of provision for special children takes a wide view of apparent problems. It would examine the school and family contexts

of pupil's 'problem' behaviour in order to avoid pre-emptively identifying the difficulties as solely within the child. This can lead to a school modifying its views of the identification and assessment of, for example, disorders of conduct.

A family therapist or other specialist worker standing outside the family and school systems may be involved where there are perceived problems with a child. A family-school liaison worker might draw insights from a systems approach. She may not be trained in family therapy but may nevertheless work pragmatically on the principle that where there is a perceived problem, it is generally better when family and school communicate and try to see the other's point of view.

In best practice, the school will have considered a range of possibilities and acted on them before being confident the 'problem' can be best addressed as if predominantly within the child. Daniels and Williams (2000) developed and applied a framework for intervention for schools (Ali *et al.*, 1997), addressing behaviour problems at different levels. It initially concentrated on a behaviour environment plan aimed at school and classroom factors, only later turning to an additional individual behaviour plan. A key principle was that, 'problems with behaviour in education settings are usually a product of complex interaction between the individual, school, family, community and wider society' (Daniels and Williams, 2000, p. 222). Three levels of intervention are proposed, in which level 1 especially applied systems perspectives.

Level 1 concerns initial referral. It does not propose developing individual education plans, but focuses on the environment in which the behaviour arises and may relate to groups of pupils or individuals. A behavioural audit is carried out aiming to achieve the optimum environment, that is one that would be achieved 'if every environmental improvement that it is reasonable to expect were made' (Ibid. p. 222). A checklist is completed of factors affecting the environment, including the classroom and the playground, (for example, whole-school policies, physical factors, classroom organisation, and the teacher's personal style). Having completed the checklist the teacher may decide to tackle an issue through developing a behaviour environment plan. She takes a baseline measure of the behaviour causing concern so the effectiveness of the behaviour environment plan is judged according to changes in the behaviour as well as modifications to the environment.

The plan runs for six weeks, after which if concern about the behaviour continues even after the behaviour environment plan has been implemented the process moves to level 2 of the framework. Here, individual behaviour plans are introduced while the behaviour environment plan

continues in place. The individual plan might involve interventions such as individual counselling or reward systems. If necessary, level 3 of the framework is introduced which might involve the help, support and advice of a specialist such as a school/ educational psychologist.

Psychodynamic approach

Psychodynamic approaches: Klein, Winnicott and Bowlby

The term ‘psychodynamic’ concerns ‘emotional conflict or conflicts taking place within a person’s internal, unconscious world or mind’ (Ayers and Prytys, 2002, p. 168).

In psychoanalysis, Sigmund Freud’s founding work and reported clinical practice (Freud, S. [1940]/2002, pp. 175–236; 1923), while almost exclusively with adults, led him to infer that children aged around 5 or 6 years struggled with deep incestuous wishes. Melanie Klein (Klein, 1932, ([various dates]/1964; [1957]/1975), through her clinical work and observation with children, considered that she was developing Freud’s hypotheses concerning the children’s incestuous wishes. She believed children aged around 2 or 3 years and even infants experienced fantasies of incestuous union and of frightening punishments. However, these fantasies were in a much more primitive form. Deep differences developed between Klein’s views and those of Sigmund’s daughter Anna Freud (Freud, A., 1945; [various dates]/1998) and their followers. Klein believed that children can be analysed through interpreting their play in a similar way to that in which adult free association is analysed. Anna Freud considered that very young children could not be analysed because their ‘ego’ is insufficiently developed to cope with in-depth interpretations of instinctual conflicts (Mitchell and Black, 1995, p. 86).

D. W. Winnicott (1958, 1965), whose name is associated with ‘object relations’ theory, trained both as a paediatrician and a psychoanalyst. He developed theories of the early mother–child relationship and its influence on an individual’s later healthy development or dysfunction. He proposed a ‘false self disorder’ affecting adult patients’ sense of being a person, and connected this to the patient’s infant relationship with the mother. Winnicott termed the infant’s earliest state of mind ‘unintegration’. The infant’s needs and wishes emerge from the unintegrated drift of consciousness, and are met by a ‘good enough’ mother.

The mother creates a ‘holding environment’ in which the baby is unknowingly protected. As she emerges from her absorption with her

infant, she does not meet the baby's needs as seamlessly as she did at first. The baby gradually comes to realise that his desires are not omnipotent. Instead, his mother provides for him, and he is dependent on her. This experience of objective reality is added to the infant's experience of subjective omnipotence. Certain 'transitional objects' (for example, a toy or treasured piece of blanket) are important in this infant worldview. The transitional object becomes an extension of the child's self. It occupies a place between the child's two experiences of his mother. The first of these experiences is the one the child creates in subjective omnipotence. The second experience is the one the child has of the mother acting for herself in the objective world.

Transitional experience more broadly connects the subjective omnipotence aspects of the self to the world of other people's subjectivity. Where the mother is not able to provide a 'good enough' environment, the core of personhood is suspended. The child develops a premature concern with the external world, which constrains his own subjectivity. The true self becomes separated from a false compliant self. Later in the individual's life, a holding environment might be found enabling him to develop authentic experience and a sense of self. In the analytic setting, the analyst provides the adult patient with this 'good enough' holding environment in which the patient's suspended self-development can be reawoken so the true self can emerge (Mitchell and Black, 1995, pp. 124–34).

Psychoanalyst John Bowlby placed great importance on the mother–child bond of 'attachment'. His theory of attachment relates to the biological survival of the species and secures the safety of the infant in a loving environment (Bowlby, 1965, 1969, 1973, 1980). He proposed five instinctive responses (sucking, smiling, clinging, crying and following) that lead to greater 'proximity' to the mother and that mediate attachment. Bowlby took the view that the child's attachment to the mother is instinctual and primary, that is, not derivative of the mother providing for the child's needs. His research into early experience of loss and separation indicated they lead to mourning. This appears to support the importance of the primacy of the child's bond with the mother. Emotional security is built up through early childhood experiences and relates to the confidence the child has in the availability of attachment figures. Different forms of anxiety all relate to the basic anxiety about the separation from the object of attachment. All defences relate back to detachment, what has been called a 'deactivation' of the fundamental need for attachment (Mitchell and Black, 1995, p. 137).

Focal psychodynamic psychotherapy

A study in the psychodynamic tradition carried out at the University of Pisa positively evaluated the effectiveness of a programme of family work. It involved 58 children with relatively mild anxiety disorder or dysthymic disorder (which involves chronically depressed mood). Treatments comprised 11 sessions of 'focal psychodynamic psychotherapy'. This began with five sessions involving the whole family in which the therapist explored the dynamic formulation of the child's conflicts in terms of family relationships. In five subsequent sessions with the child only, the therapist aimed to help the child make connections between his feelings and unconscious conflicts about the relationship with his parents. The final session included the whole family, and the therapist once more set out the dynamic formulation of the child's conflicts rooted in family relationships. Outcomes were encouraging. A control group was referred for community treatment. Some 60 per cent of children in the study were in the clinical range of the Child Behaviour Checklist (Achenbach and Edelbrock, 1983). In the treatment group, this was reduced to 34 per cent at follow-up testing. In the control group the percentage increased to 65 per cent (Muratori et al., 2002).

Arts therapies and play therapy

Several therapies draw on psychodynamic perspectives, including some approaches to music therapy, art therapy, drama therapy and movement therapy. These may be collectively referred to as 'arts therapies'. They use different approaches and perspectives and aims can include therapeutic ones. Some approaches to play therapy involve psychodynamic orientations. Also, psychodynamic approaches and perspectives are influential for some arts therapists. The idea of the unconscious has been said to be 'central to some areas of the arts therapies: their thinking and their methodology' (Jones, 2002, p. 126).

Some arts therapists draw on 'ways of engaging with the unconscious which can bring about change or healing' (Ibid. p. 128). Art-making and arts products within therapy are considered to relate to the unconscious in ways 'fundamental to the recovery of health, or the improvement or maintenance of well being' (Ibid. p. 128). In the UK, research (Karkou, 1999a and 1999b, *passim*) indicates the main theoretic influences in arts therapies included those of Donald Winnicott (1958, 1965) and Melanie Klein ([1957]/ 1975).

Where possible, the effectiveness of psychotherapies is evaluated in line with evidence-based practice. There is a perceived dichotomy between

seeking to use objective approaches to assess the efficacy of art therapies and the more fluid nature of therapeutic encounters themselves, making developing evidence-based practice challenging. Attempts include examining ways in which drama therapists ascertain whether the client is 'getting any better', for example experiencing improved well-being (Valente and Fontana, 1997, p. 29). Evidence might be client self reports, projective techniques, and reports by other group members. In art therapy, evaluation may involve a review and pictures with the client, which may uncover, 'connections and links that have previously been unconscious' (Schaverien, 1995, p.28).

Psychodynamic perspectives in education

A psychodynamic approach implies underlying unconscious or subconscious forces influencing behaviour, making general connections with special education tangential. Settings for special education may encourage more open communication from pupils and may provide activities that may be communicative and expressive such as drama, aspects of physical education, and play. Important differences between such activities and their therapeutic counterparts cannot be ignored. Drama is not drama therapy and play is not play therapy. The aim of each is different and the training and perspectives of educators and therapists substantially differ.

In some specialist settings psychodynamic interpretations may be adapted. The Mulberry Bush School in England (www.mulberrybush.oxon.sch.uk) is a special school, which continues and develops the work of its founder and psychotherapist Barbara Dockar-Drysdale (1991, 1993). She developed her approach from the work of Donald Winnicott (1958, 1965). The school works on the principle that the children have missed the 'building blocks' of nurturing experiences and seeks to offer them the opportunity to re-experience caring and clear relationships with adults and other children. An aspect of this is adults using opportunities associated with group living to give the child clear expectations, routines and rules about how to live and get on with others (Farrell, 2006, p. 66).

In mainstream settings, nurture groups, a form of early intervention (Boxall, 2002), have their foundations in Bowlby's attachment theory. These groups are intended for children whose emotional, social and behavioural 'needs' cannot be addressed in a mainstream classroom. The intention is to return the children to mainstream classes as appropriate. The group might comprise a teacher and an assistant and ten to 12 children. It is hypothesised that these children have not had early

experiences that would have enabled them to function appropriately for their age socially and emotionally.

The relationship between the child and the adults is seen as important to the child developing a sense of self. Social development is encouraged and concentrates on the emotional aspects of interactions between child and caregiver. Therefore, a nurture group emphasises emotional growth. It offers a range of experiences in an environment that provides security, predictable routines, clear boundaries, and repeated planned opportunities for learning (Ibid.). The adults might 'model' suitable positive behaviour in a structure commensurate with the child's developmental level. It is hoped consequently the child is able to develop an attachment to the adult, receive approval, and experience positive outcomes.

Cognitive-behavioural approach

Cognitive and behavioural elements

As a preliminary, it is necessary to define 'psychological constructivism'. This is: '. . . a family of theories about mind and mentation' (Mahoney, 1991, p. 95). These theories have several characteristics. They 'emphasise the active and proactive nature of all perception, learning and knowing' (Ibid.). With regard to sentient and sapient experience, the theories 'acknowledge the structural and functional primacy of abstract (tacit) over concrete (explicit) processes' (Ibid.). Finally, these theories take a particular view of learning, knowing and memory. They see these as 'phenomena that reflect the ongoing attempts of body and mind to organise (and endlessly reorganise) their own patterns of action and experience . . .' (Ibid.).

Now psychological constructivism has been clarified, it can be recognised that this supports a 'cognitive-constructivist' model of human behaviour (Reinecke and Freeman, 2003, p. 226).

In turn, the cognitive-constructivist model underlies cognitive therapy.

A behavioural perspective defines personality according to individual behaviours assumed to arise, 'primarily as a result of an individual's learning history' (Antony and Roemer, 2003, p. 186). But behaviour therapy is not completely uniform, and numerous behavioural strategies are used in treating psychological problems (Ibid. p. 182).

The two components of cognitive therapy and behaviour therapy help define a cognitive-behavioural perspective. Differences are apparent in the two perspectives. Behavioural approaches such as operant condi-

tioning (Skinner, [1953]/ 1965, pp. 62–9) regard behavioural reactions and emotional reactions as the result of reinforcement history and environmental contingencies. By contrast, a cognitive-constructivist model sees behaviour as, ‘goal directed, purposive, active, and adaptive’ (Reinecke and Freeman, 2003, p. 226). However, it is suggested behavioural therapists may find in the cognitive therapy model, ‘a brief, active, directive, collaborative, psychoeducational model of psychotherapy that is empirically based and has as its goal direct behavioural change’ (Ibid. p. 224).

In practice, the merging of cognitive therapy and behavioural therapy is, ‘more the rule than the exception’ (Reinecke and Freeman, 2003, p. 224). It has been proposed that cognitive-behavioural approaches represent ‘hybrids of behavioural strategies and cognitive processes, with the goal of achieving behavioural change’ (Dobson and Dozoiz, 2001, p. 11–12). From this perspective, behaviour is influenced by cognition (attitudes and assumptions) and by cognitive appraisal (the process of thinking and reasoning).

Cognitive-behavioural interventions

Cognitive-behavioural interventions involve: monitoring cognitions; seeking connections between thoughts, feelings and behaviour; and seeking to replace negative cognitions with positive ones. Examples indicating some of the rationale of cognitive-behavioural therapies include:

- rational-emotive behavioural therapy
- cognitive therapy
- problem-solving dialogues and training.

Rational-emotive behavioural therapy

Rational-emotive behavioural therapy deals with rational and irrational beliefs (Ellis *et al.*, 1997). Psychosocial disturbances are seen as mainly self-created and arising from beliefs, interpretations and evaluations of what happens in a person’s life. Beliefs we hold about ourselves, others and our environment, can influence thought, emotions and behaviour. These beliefs may be positive or negative in their effect, and can be modified. Rational beliefs are self-enhancing. Their consequences are ‘healthy’ negative emotions such as sorrow and concern. Irrational beliefs on the other hand are characterised by absolutist thoughts and inferences that cannot be substantiated. They lead to ‘unhealthy’ negative emotions such

as anger, anxiety and guilt, are self-defeating and contribute towards psychosocial problems. These problems, it is argued, are brought about by absolutist demands:

- directed at oneself (ego disturbance), or
- concerning conditions (discomfort disturbance).

A cognitive analysis may be used in terms of:

- an activating event, such as perceptions and inferences
- rational and irrational beliefs
- emotional and behavioural consequences.

An individual's adaptive behaviour can be encouraged by correcting or modifying his irrational thinking. This is because disturbances are considered to be brought about mainly by current beliefs rather than past events and memories. Change is brought about as the child works on his irrational beliefs through dialogue with the therapist. The beliefs are identified, discussed and challenged and are tested empirically, logically and pragmatically.

Cognitive therapy

Cognitive therapy (Beck *et al.*, 1979) concerns the cognitive processes of perceiving, thinking and reasoning and their effect on behaviour and emotions. An individual constructs his own experiences and beliefs and his beliefs can be sampled by self-reports and other means. Central notions are:

- automatic thoughts
- cognitive schema
- cognitive deficits and distortions.

Automatic thoughts, unlike voluntary thoughts, appear to arise spontaneously, are difficult to control and may be distressing. Cognitive schemas are deep cognitive processes that are formed in early learning experiences. They determine a person's view of himself, his view of the world and his relationships with others.

Cognitive schemas are maintained and reinforced by cognitive distortions such as over generalising. These distortions bias the selection of information to support existing schemas. Cognitive deficits, such as in

memory or perception, also help maintain schemas. For example, an individual may be unable to recognise sufficiently the consequences of his actions. These processes lead to thinking and reasoning becoming inflexible and judgements becoming absolute (typified by perceptions of language such as 'must' or 'ought').

Psychosocial problems arise as exaggerations of normal responses. The therapist, with the active involvement and motivation of the child, encourages him to reappraise beliefs logically and empirically. This includes looking for alternative explanations for events, different ways of acting and responding, and different ways of behaving.

Problem-solving dialogues and training

The working hypothesis of problem-solving dialogues and training work is that the child lacks problem-solving skills necessary for effective social functioning. These approaches have cognitive and behavioural elements and use structured programmes to help the child with psychosocial problems. Problem-solving skills training (D'Zurilla, 1986) involves:

- being aware of the problem
- defining and formulating it
- putting forward alternative solutions
- deciding the approach
- testing the solution.

Participants are trained to identify problems, prevent their initial impulses, produce several alternatives, consider possible consequences, plan their solutions and evaluate them.

Cognitive-behavioural perspectives and special education

In schools and other settings where a child has special educational provision, educators can liaise with a psychotherapist to support a cognitive-behavioural approach. You might encourage more positive interpretations of events where a child tends to view them very negatively. 'Self-talk', a type of internal monologue, might be introduced as a strategy and used in therapy to aid the child's learning and development. This can help manage anxiety. A pupil might be anxious in certain situations where the anxiety is not related to any apparent 'real' cause. He may first be taught to recognise the starting signs of the anxiety, perhaps increased heart rate or

sweating palms. On recognising these signs, the pupil is taught to use self-talk. This may be agreed and scripted so that the pupil knows it very well. It is likely to include certain aspects such as encouraging calmness, challenging negative interpretations of events or circumstances, and seeking to replace a negative interpretation with a plausible and likely alternative explanation. A pupil who becomes very anxious when he thinks a certain teacher is trying to ridicule him might learn a script such as the following.

‘I will keep calm. The teacher has just asked me if I will be able to manage the homework. I think she is being sarcastic. But she might be just checking so she can help me before the lesson ends. I will say that I don’t understand everything and ask the teacher if she will explain part of it again.’

Self-talk can be encouraged and reinforced in different settings including the classroom. Similarly, strategies for anger management can be supported and encouraged in schools.

As indicated earlier, cognitive-behavioural interventions involve: monitoring cognitions, seeking connections between thoughts, feelings and behaviour, and seeking to replace negative cognitions with positive ones. A cognitive-behavioural approach has been employed in training programmes for parents of children with attention deficit hyperactivity disorder (ADHD). Parents have been taught special child management techniques and given information about this condition. At the same time, cognitive therapy techniques have been used to aid parents’ acceptance, management and understanding of ADHD (Anastopoulos and Farley, 2003, pp. 187–203). Parent training plus medication appears superior to only medication for certain outcomes and for some children and their families (Ibid. p. 202). For example, better outcomes are found for family functioning, and children who are also anxious appear to benefit (Ibid. p. 202). Parent training tends to improve parents’ self-esteem as they learn to cope better and reduces their stress. Furthermore, it appears to increase the child’s compliance and shortens the time it takes to complete tasks.

Conclusion

Psychotherapy is a broad field and relates to special education in complex ways. A systems perspective takes full account of the context in which behaviour takes place, avoiding within child explanation where environmental factors can explain behaviour. Related approaches and issues are: functional family therapy; the family and the school as systems; joint

systems approaches involving family and school; and relationships between systems perspectives and special education.

Among important contributors to a psychodynamic perspective are Melanie Klein, Donald Winnicott and John Bowlby. Focal psychodynamic psychotherapy can be effective with children experiencing mild anxiety and depressive disorder. Arts therapies and play therapy may have a psychodynamic orientation. Particular applications to special education developed from the work of Winnicott and Bowlby.

A cognitive-behavioural approach combines cognitive and behavioural elements. Rational-emotive behavioural therapy seeks to bring about change by the therapist working with the child on his irrational beliefs through dialogue. In cognitive therapy, the therapist encourages the child to reappraise beliefs logically and empirically. Problem-solving dialogues and training involves training individuals to identify problems, prevent initial impulses, produce alternatives, consider consequences, and plan and evaluate solutions.

Cognitive-behavioural approaches have substantial applications in special education.

Thinking points

Readers may wish to consider the:

- credibility and application of each of the perspectives outlined
- extent to which aspects of these different perspectives can be used eclectically.

Key texts

Abela, J. R. Z. and Hankin, B. L. (eds) (2008) *Handbook of Depression in Children and Adolescents*, New York, The Guilford Press

The parts of this book cover epidemiology, etiology, treatment, prevention and special populations. The treatments sections include cognitive-behavioural approaches, psychopharmacological treatment, the ACTION treatment programme, positive psychotherapy, and interpersonal psychotherapy.

Bloomquist, M. and Schnell, M. (2005) *Helping Children with Aggression and Conduct Problems*, New York, Guilford Press

This book describes interventions found effective with children aged 3 to 12 years with aggression and conduct problems. These include social

competence training, parent and family skills building, and school-based approaches. Risk factors and protective factors are also described.

Dobson, K. S. (ed.) (2003) (2nd edition) *Handbook of Cognitive-Behavioural Therapies*, New York, Guilford Press

Part one of this book deals with conceptual issues. Part two describes several therapies, including 'Problem-solving therapies' (Chapter 7) and 'Rational-emotive behaviour therapy' (Chapter 10). A further chapter, 'Cognitive-behavioural therapy with youth', outlines several approaches including relaxation training, affective education and cognitive restructuring.

Folensbee, R. W. (2007) *The Neuroscience of Psychological Therapies*, Cambridge, Cambridge University Press

This book considers brain functioning and brain behaviour connections in relation to the practice of psychotherapy. It concerns basic processes (for example, affect, anxiety) and the process of psychotherapy (for example, affect in therapy, anxiety and change).

Fonagy, P., Target, M., Cottrell, D., Phillips, J. and Kurtz, Z. (2002) *What Works for Whom? A Critical Review of Treatments for Children and Adolescents*, New York, Guilford Press

This text includes chapters on 'Anxiety disorders', 'Depressive Disorders', 'Disturbance of Conduct' and 'Attention-Deficit/ Hyperactivity Disorder' as well as a concluding chapter examining the effectiveness of various interventions including cognitive-behavioural, psychodynamic, and family/ systemic therapies.

Gurman, A. S. and Messer, S. B. (eds) (2005) (2nd edition) *Essential Psychotherapies: Theory and Practice*, New York, Guilford Press

Readers may find particularly relevant to the present context chapters on 'Contemporary Issues in the Theory and Practice of Psychotherapy: A Framework for Comparative Study' (Chapter 1), 'The Theory and Practice of Traditional Psychoanalytic Treatment' (Chapter 2), 'Behaviour Therapy' (Chapter 6), 'Cognitive Therapy' (Chapter 7) and 'Family Therapies' (Chapter 11).

Kendall, P. C. (ed.) (2006) (3rd edition) *Child and Adolescent Therapy: Cognitive-Behavioural Procedures*, New York, Guilford Press

This book includes sections on guiding theory for cognitive-behavioural theory, externalising disorders, internalising disorders, special populations, and special topics.

Mitchell, S. A. and Black, M. J. (1995) *Freud and Beyond: A History of Modern Psychoanalytic Thought*, New York, Basic Book

This readable introduction considers ‘Sigmund Freud and the Classical Psychoanalytical Tradition’, ‘Ego Psychology’, ‘Melanie Klein and Contemporary Kleinian Theory’, and ‘The British Object Relations School: W. R. D. Fairbairn and D. W. Winnicott’ as well as other developments. The final two chapters consider controversies in theory and technique.

Disruptive behaviour disorders

Introduction

Disruptive behaviour disorders are among the most challenging disorders in special education. I begin with a note about the importance of support for teachers and others involved in educating pupils with these disorders. Drawing on the classifications in the Diagnostic and Statistical Manual of Mental Disorders (fourth edition text revision) (*DSM-IV-TR*) (American Psychiatric Association, 2000), this chapter considers oppositional defiant disorder briefly and then conduct disorder more fully. I comment on the criteria for conduct disorder and related issues.

In examining interventions for disruptive behaviour disorders and implications for education, the chapter distinguishes approaches relevant for children (3 to 10 years) and those for adolescents (10 to 17 years). Illustrative interventions are chosen that could be used in schools, could be used to complement school provision or which suggest schools could learn from the effectiveness of these interventions in reviewing their own provision. The question of medication is then considered. Finally, I summarise the aspects of provision in relation to curriculum and assessment, pedagogy, resources, therapy and care, and organisation.

When considering the points raised in this chapter readers may wish to reflect on a particular pupil, how the teacher and others approach the disruptive behaviour, how and when the school senior staff and head-teacher are involved, when and how other support such as that of the school psychologist is brought to bear, and how parents are involved. Also the reader may reflect on the strategies that are available to a specific school and how particular ones are chosen, monitored and evaluated in the setting.

Support for teachers and others

It is important to emphasise the difficulty of educating and helping children and young people with disruptive behaviour disorders. For teachers and others such work can at times feel de-skilling, impossibly stressful and unrewarding. If, in addition, there is the burden of long hours, poor support, distant management and poor teamwork the work becomes barely possible.

The importance of support for those working with pupils with disruptive behaviour disorders is therefore probably self-evident. It can include:

- regular training
- counselling for staff
- opportunities for discussing and seeking to resolve issues as a staff team
- supportive and responsive management personnel and structure.

Where these are in place, many who work with children and young people with disruptive behaviour disorders, whether in schools or secure settings, can find the work very rewarding.

Definitions, prevalence and possible causal factors

Disruptive behaviour disorders and schools

The main classifications of disruptive behaviour disorders in *DSM-IV-TR* (American Psychiatric Association, 2000) are ‘oppositional defiant disorder’ and ‘conduct disorder’. For teachers, it is important to be as clear as possible about the nature of disruptive behaviour disorders, although this is made difficult by several factors.

There is debate about the criteria that are appropriate for these disorders and variability in the level of severity when applying any criteria. In schools, it is sometimes difficult to disentangle what appear to be disruptive disorders on the one hand, and poor teaching and poor pupil management on the other. Teachers who are working hard to encourage positive behaviour in pupils may not be receptive to suggestions that the source of their most disruptive pupil’s behaviour might be their own poorly adapted teaching skills. Yet such avenues will need to be explored before a confident assessment can be undertaken.

In current terminology this might be seen as removing supposed 'barriers' to learning and development before assuming a predominantly 'within child' explanation of difficulties. Tension exists between the extremes of assuming the difficulties lie very predominantly with the child, and assuming that if the teacher only tries hard enough to remove supposed barriers to learning any apparent problems will recede. It may be helpful therefore if a trusted colleague outside the usual school setting and with access to the child's family is involved in assessments of a child who is considered to manifest disruptive behaviour disorders. This might be a school psychologist or a member of a behaviour support team.

Oppositional defiant disorder

As classified under the DSM-IV-TR (Ibid.) the essential feature of oppositional defiant disorder is a repeated pattern (lasting at least six months) of behaviour towards people in authority that is 'negativistic, defiant, disobedient, and hostile' (Ibid. p. 100). This behaviour leads to significant impairment in 'social, academic or occupational functioning' (Ibid. p.100). ADHD is common in children with oppositional defiant disorder (Ibid. p.101).

The prevalence of oppositional defiant disorder varies from 2 per cent to 16 per cent depending on the nature of the population sample and the methods of assessment. This may be an indication of the point raised earlier about the difficulty of determining whether apparent oppositional defiant disorder is predominantly (and rather loosely speaking) a 'within child' disorder or in part a consequence of poor teaching and inadequate behaviour management. It also suggests that more could be done to reach agreement locally, regionally and nationally on improving the assessment of this condition.

In local areas, it could be agreed which professionals should be involved in making the assessment of oppositional defiant disorder so that there is at least consistency in the people making decisions. Coupled with this, regular training of those involved and moderation of their assessments could help improve the validity and reliability of judgements. Having said all this, it needs to be acknowledged that the condition is not easy to assess because of its very complex setting within human interactions.

The disorder is usually evident before the age of 8 years and usually not later than early adolescence (Ibid. p. 101). In a significant proportion of cases, oppositional defiant disorder is a developmental antecedent of conduct disorder. All the features of oppositional defiant disorder are

usually present in conduct disorder so oppositional defiant disorder is not diagnosed if the criteria for conduct disorder are met.

Conduct disorder

Definitions and features

MAIN FEATURES AND CHARACTERISTIC BEHAVIOURS

Conduct disorder can include a range of behaviours such as aggression, destroying property, stealing, housebreaking, truancy and other infringements of other people's rights and violations of social rules. It is commonly associated with other disorders, including ADHD and substance abuse disorders.

The main aspect of conduct disorder as classified under the *DSM-IV-TR* (Ibid.) involves the violation of the rights of others or the transgression of 'major age-appropriate social norms' (Ibid. p. 98 criterion A). The behaviour forms a repetitive and persistent pattern. Fifteen behaviours are specified under four groupings:

- Aggression towards people or animals (seven behaviours)
- Damage to property (two behaviours)
- Deceitfulness or theft (three behaviours)
- 'Serious' rule transgression (three behaviours).

Three or more of these 15 characteristic behaviours must have been present during the previous 12 months with at least one being evident in the previous 6 months.

Criterion B (Ibid. p. 99) specifies that the behavioural disturbance cause 'significant impairment' in functioning: social, occupational or academic. A further Criterion C, applies to those aged 18 years and over and specifies that the criterion for another disorder, antisocial personality disorder, would have been excluded if a diagnosis of conduct disorder was determined (Ibid p. 99).

CHILDHOOD AND ADOLESCENT ONSET

A coding system allows the age of onset to be specified as either childhood onset or adolescent onset. There is a further coding of 'unspecified onset' where the age when the first signs appeared is unknown. In childhood onset, although the three or more behaviours will have been identified to

give the diagnosis, at least one will have started before the age of 10 years. For adolescent onset, no criterion would have been identified before the age of ten. One reason for specifying age of onset is that this has different implications.

With childhood onset, the individual is usually male, frequently manifests physical aggression towards others, and has 'disturbed peer relationships'. Usually the child has symptoms meeting the full criteria for conduct disorder before puberty. Many children also have ADHD. They are more likely to have persistent conduct disorder and to develop adult antisocial personality disorder than those with adolescent onset.

By comparison, those with adolescent onset are less likely to show aggressive behaviours, or to have persistent conduct disorder, or develop adult personality disorder. They are more likely to have normal peer relationships. Also, the male to female ratio is lower than for childhood onset (Ibid. p. 95).

OTHER FEATURES

DSM-IV-TR also outlines features and disorders associated with conduct disorder. These include lack of empathy, outbursts of temper and recklessness. The behaviours may lead to school suspension or exclusion from school and may preclude attending an ordinary school or living with parents or foster parents. The individual's intelligence may be lower than average, especially verbal intelligence. Academic achievement, particularly reading and verbal skills, is frequently below age and intelligence level expectations (Ibid. 96).

LEVELS OF SERIOUSNESS, PERSISTENCE AND GENDER DIFFERENCES

The behaviours that are intended to indicate conduct disorder cover a range of levels of seriousness, although none are trivial.

In *DSM-IV-TR* there are some very serious levels of behaviour. Within the broader scope of aggression to people and animals, Criterion A3 refers to the use of a weapon such as a knife or a gun, and Criterion A6 concerns stealing while confronting a victim and includes as an example armed robbery. Other criteria are by comparison less serious. Criterion A11 (under deceitfulness or theft) concerns often lying 'to avoid obligations' or for other reasons; and Criterion 15 (within violation of rules) refers to being often truant from school, commencing before age 13 years.

This makes it important that the specific criteria that have been used for identification are known to those concerned. These include parents,

teachers, social workers, therapists and others. Without knowledge of the exact criteria, it will be unclear what the broad categorisation of conduct disorder conveys. This is recognised in the setting out of the criteria in the specification of the severity of conduct disorder. 'Mild' implies a minimum number of criteria have been met to reach a diagnosis and that 'only' minor harm has been caused to others. 'Severe' indicates many conduct problems above the number required for diagnosis or that the conduct has caused 'considerable' harm to others.

Particularly where conduct disorder involves deceitfulness and lying, it is unsurprising that the child himself may not divulge his behaviour or that others, including parents, teachers and peers, may not always know about it. However, the persistence of conduct disorder usually implies that it is apparent in different settings. The evidence would be seen in the home, at school, in the community, at youth clubs and elsewhere.

Gender differences are evident. In boys, conduct disorder tends to be associated with fighting, stealing, school discipline problems, and vandalism. For girls it may implicate truancy, lying, substance abuse, running away and prostitution (Ibid. p. 97).

Prevalence

Prevalence of conduct disorder varies considerably. This appears to depend on the nature of the population sampled and on the methods used to ascertain it. In the general population reported rates range from 1 per cent to 10 per cent. Prevalence rates are higher among males than females (Ibid. p.97).

The points raised concerning the difficulty of ascertaining prevalence that were raised when oppositional defiant disorder was examined may also apply to judgements of the prevalence of conduct disorder. The co-occurrence of conduct disorder and ADHD and anxiety and depression is high, especially in clinic populations.

Causal factors

There is debate about the possible causal factors relevant to conduct disorder. The role of genetically transmitted constitutional features is suggested by certain observations. For example, a much larger proportion of boys than girls experience conduct disorder, and heritability coefficients are often between 0.4 and 0.7 (Simonoff, 2001).

Another theory draws on evidence that children with conduct disorder tend to have lower arousal levels than others. This, it is proposed, leads

them to be fearless and stimulus seeking. It also leads to the individual being less responsive to reward (for example, for socially accepted behaviour) and punishment (for example, for unacceptable behaviour). Several studies indicate that low arousal as indicated by various physiological measures are typical of young people with conduct disorders (Raine, 2002). Atypically low arousal levels may be inherited, a view in part supported by twin studies (Kazdin, 1995). The low arousal theory suggests that interventions such as very structured learning environments to help children internalise social rules may be justifiable.

Children with conduct disorders tend to have social skills deficits more generally (for example, Spivak and Shure, 1982). They tend to lack skills to understand or implement alternative solutions to problematic social situations. Group-based social skills programmes developed to train young people seek to address skills such as (Carr, 2006, p. 379):

- correcting hostile attributional bias
- accurately judging difficult social situations
- generating a variety of solutions to these problematic social situations
- anticipating the effect of these solutions in the shorter and longer term
- carrying out the best solution
- learning from feedback.

Among social learning theories of conduct disorder, modelling theory (Bandura and Walters, 1959) suggests that aggression is learned through imitation and modelling. Sometimes the imitation and modelling is of the aggressive behaviour of parents, the fathers of aggressive boys typically being aggressive themselves. Interventions that draw on these theories involve helping parents to model appropriate behaviour for their children, or providing alternatives in foster care or residential settings.

Systems theories, which consider the role of family and society in relation to conduct disorder, include structural family systems theory. This focuses on certain characteristics that appear typical of families of children with conduct disorder. These include: disorganisation, unclear rules and roles, and confused communication. Family therapy relating to such theories seeks to improve the coherence of the family through its members. It does this by having families meet together in sub-groups to fulfil certain goals. For example, a goal might be to improve communication styles and clarifying hierarchies. Systems approaches also link home and school systems (Dowling and Osborne, 1994).

Identification and assessment of disruptive behaviour disorders

Assessments of disruptive behaviour disorders include assessments of a child's behaviour in an interactional context. This may involve a clinician carrying out structured interviews with teachers and parents. A behavioural rating scale might be completed by teachers and parents. Direct observation of the child in different settings is also important. Another aspect of assessment is that involving child characteristics such as temperament, social skills and academic achievement.

Provision for disruptive behaviour disorders

I have already mentioned the difficulties of identifying disruptive behaviour disorders and suggested this partly explains widely varying estimates of prevalence. In addition, where research into treatments has been carried out, it has not always used criteria for conduct disorder or oppositional defiant disorder. The outcomes of some research are therefore suggestive of what works rather than clearly indicative.

Children (3 to 10 years old)

Various approaches have been demonstrated to be effective with some children with disruptive behaviour disorders. These include:

- parent training
- social skills training and anger management coping skills training
- problem-solving skills and cognitive-behavioural therapy
- classroom contingency management.

Parent training

One rationale for parent training is that problems such as children's disorders of conduct are considered to relate to inappropriate patterns of family interaction. To the extent to which this is correct, it follows from this that altering these patterns is likely to lead to positive changes in the child's behaviour. Typically, parent training is based on behavioural management principles drawn from social learning theory. It may include role-play, behavioural rehearsal and homework exercises.

Interventions using parent training include:

- the 'Incredible Years Training Series' programme (Webster-Stratton and Reid, 2003)

- the ‘Oregon Social Learning Center Program’ (Patterson and Forgatch, 1995)
- ‘Parent-Child Interaction Therapy’ (Eyberg, Boggs and Algina, 1995).

The ‘Incredible Years Training Series’ (pp.224–40) consists of three training curricula for parents, children aged 2 to 8 years, and teachers. It seeks to improve parents’ competence, for example by encouraging them to work together, increasing positive parenting, and reducing negative parenting.

The ‘Oregon Social Learning Center Program’ has been successfully used in a range of contexts. This programme addresses aggression and non-compliance in children aged 3 to 12 years. It normally begins by setting out how social learning principles apply to family life. Parents learn to identify and track several of their child’s behaviours. Parents usually focus on two or three behaviours that concern them, such as non-compliance.

They monitor these for daily one-hour periods over a week. Next the programme introduces a positive reinforcement system using points underpinned by reinforcers such as treats, and social reinforcement including praise. Parents are taught to use time out for non-compliance and aggressive behaviour. Mild punishments (chores) and response cost (loss of privileges) are also used. Problem-solving and negotiation strategies are taught to help with family crises and marital difficulties (Patterson and Chamberlain, 1988).

‘Parent-Child Interaction Therapy’ was developed at the University of Florida. It aims to teach the parent how to develop a warm and responsive relationship with their child and to teach the child how to behave suitably. First, parents develop non-directive play skills intended to improve the quality of child-parent relationship. Next, within the play interaction, the parent learns to direct the child’s play with direct instructions. The parent seeks to establish consistent consequences, using praise for compliance and time out for non-compliance. Parents take turns to interact with the child in the clinic. While they are doing so, a therapist positioned behind a one-way mirror coaches them using an ear microphone. The interactions are later extended to the home setting.

In an early study of ‘Parent-Child Interaction Therapy’ (Eyberg, Boggs and Algina, 1995), children’s behaviour in the treatment group fell from the clinical range to the normal range. Over the same period, a waiting list control group experienced no change. Classroom behaviour also improved. Subsequent studies have tended to confirm the success of the

approach, including the generalising of appropriate behaviour to the classroom (Funderburk *et al.*, 1998).

Several factors tend to make parent training more effective (for a summary see Roth and Fonagy, 2005, p. 393). Among these factors are:

- the children are younger
- the disturbance of conduct is less severe
- there is less family socio-economic disadvantage
- parents are together.

Conversely, factors have been identified which tend to be associated with failure to benefit from the programmes. Attempts have been made to respond to these – for example, partner support training has been tried where there is discord in the parents' marriage. Parent training may benefit the child's education because it can contribute to improved behaviour in the classroom.

Social skills training and anger management training

One perspective is that conduct disturbance relates to deficits in information processing. In line with this view, it is suggested a child with conduct disturbance tends to have distorted appraisals of social events. It is proposed he will therefore benefit from treatments aiming to modify these distortions and that lead to better ability to regulate his emotional responses.

One approach to anger management training for aggressive children used a 'contextual social cognitive' model of prevention (Lochman, Barry and Pardini, 2003, p. 264). Potential mediators to adolescent anti-social behaviour were identified. These were child level factors such as lack of social competence, and parent level contextual factors such as poor child discipline. Within this model, an 'Anger Coping Program' was developed. It included sessions such as (Ibid. p. 267):

- using self instruction
- perspective taking
- choices and consequences
- steps for problem solving.

A school-based strategy, 'Coping Power' (Lochman and Wells, 1996), involved primary school-children with conduct problems. Thirty-three structured sessions were administered in the children's school-days. The

children reviewed examples of social interactions, discussing social cues and motives and there were problem-solving components to the programme. Particular skills were practised to manage anger arousal as well as anger control strategies such as self-talk.

Evidence from such interventions indicates that social skills training and anger management coping skills training can help reduce *mild* conduct problems in pre-adolescents (Quinn *et al.*, 1999, provide a review).

Problem-solving skills training and cognitive-behavioural therapy

Problem-solving skills training developed from the work of Spivak and Shure (1978) aims to influence interpersonal cognition. Aggressive children are considered to be more likely than non-aggressive children to attribute hostile intentions to others and anticipate rejection.

Children with conduct problems are not very adept at coming up with different solutions to interpersonal problems and are poor at working out the motivations of others.

Accordingly, problem-solving skills training aims to help these children develop the necessary interpersonal and cognitive problem-solving skills. Typically, this might involve modelling and role-play. The aim is to teach the children to recognise and alter how they think about and respond to social situations.

The training takes place in about 20 clinic-based individual sessions led by a therapist. In these sessions there is the opportunity to examine the ways in which the child usually responds to interpersonal situations and encourage a structured approach to solving these problems. Structured tasks related to real-life situations are used. Social behaviours are encouraged by modelling and direct reinforcement.

Cognitive-behavioural therapy has been used effectively with children with conduct disorder. An approach for children aged 2 to 13 years with conduct disorder involved problem-solving skills training for the children and for parents, training to help them manage the child's behaviour. The problem-solving skills for children included using 'stop and think' self-statements. Parents were taught to manage their child's behaviour through such techniques as positive reinforcement (Kazdin, 2003, pp. 241–62).

The intervention focused on individual characteristics as well as 'external and interactional events' to promote socially acceptable behaviour. Among individual facets were cognitive and behavioural repertoires and 'predispositions' to respond to potentially difficult situations. External and internal interactional events included the way that other people before

and after the child's behaviour, that is, antecedents and consequences from others (Ibid. p. 258).

Evidence indicates that problem-solving skills training can be effective, particularly in combination with parent training. Where the effects are smaller this tends to be when the child's dysfunction is more severe and when perceived 'barriers' are perceived to be higher (for example, Kazdin and Wasser, 2000).

Classroom contingency management

Classroom contingency management is a substantial part of some combined interventions.

One study (Barkley *et al.*, 2000) compared many behavioural interventions, the effect of parent training and the combined treatments. The study also compared the results for these three conditions with the results of a control group.

Some 158 children were screened for disruptive behaviour. Of these, 57 per cent met clinical criteria for oppositional defiant disorder, 12 per cent met the criteria for conduct disorder and over 50 per cent met the clinical criteria for ADHD. A range of classroom interventions was used:

- a token system
- over correction
- response cost
- time out
- group cognitive-behavioural self-control training
- group anger control training
- group social skills training
- support for home-based reinforcement.

The parent training programme was based on the Oregon model. Among outcome measures was showing less aggression, as indicated by a Child Behaviour Checklist-Teacher Report Form (Achenbach and Edelbrock, 1983). Such improvements were found for the multiple behavioural interventions. However, no effects were discernable for parent training. The latter finding may relate to the parents not having sought out the parent training; consequently, they were perhaps not as motivated and committed to the training as they might otherwise have been.

Unfortunately, such approaches have not been shown to generalise to other settings such as the child's home, or to continue beyond the end of the programme.

Adolescents (10 to 17 years)

By the time young people with conduct disorder have reached the age of adolescence, many behaviours relating to conduct disorder involve law-breaking. Approaches that have been effective with adolescents include those drawing several interventions together in a multiple level package. These include:

- family-based interventions (Functional family therapy and multi-systemic therapy)
- Teaching-Family Model in group homes, and fostering
- combination packages of adolescent-focused interventions
- school-based interventions.

Family-based interventions: Functional family therapy and multi-systemic therapy

One of the justifications for family-based interventions for adolescent conduct disorders are the links that are found between family difficulties and adolescent behaviour problems.

Functional family therapy was formulated by Alexander and Parsons (1982) and developed further in later versions (Alexander, Waldron, Newberry and Liddle, 1988). It takes the view that an adolescent's difficult behaviour is serving a function, such as regulating distance between family members. Consequently, intervention seeks to tackle not just the adolescent's behavioural problems and cognitive dysfunction, it also seeks to address family interactions. The intervention aims to change patterns of interaction and communication so as to encourage adaptive family functioning.

Multi-systemic therapy appears to be a promising intervention for serious young offenders. A home-based intervention provided by a single therapist, multi-systemic therapy draws on a variety of techniques. These include family therapy, parent training, behavioural approaches and cognitive approaches, depending on circumstances. With delinquent adolescents, it has reduced recidivism, improved family pathology, and improved individual pathology (Borduin, 1999). Multi-systemic therapy (and parent training) has been reviewed indicating that for young delinquents these interventions tend to reduce the time spent in institutions and the frequency of arrests (Wolfenden *et al.*, 2003).

The Teaching-Family Model in group homes, and fostering

Many group homes for aggressive and delinquent adolescents in the USA use Teaching-Family Model principles. Each home is run by a married couple with at least one year's training in teaching family model (Kirigin, 1996). Treatment includes:

- academic tutoring
- a reinforcement system for monitoring school behaviour
- a multi-level points system
- social skills training
- self-government procedures.

There is evidence of the benefits of the Teaching-Family Model while the adolescents are on the programme. However, the effects tended to be lost when participants left the programme. This seems to be a particular instance of the broader difficulties of generalising improvement that is often found with behavioural programmes.

The 'Oregon Social Learning Center Program' (Patterson and Forgatch, 1995) uses elements of social learning theory and conditioning. It seeks to tackle aggression and non-compliance in children aged 3 to 12 years. Parents learn to identify and monitor their child's behaviour, focusing on a few behaviours that concern them. They do this in daily one-hour periods over a week. The programme then introduces a positive reinforcement system of points underpinned by reinforcers. Parents are taught to use the strategies of time out for non-compliance and aggressive behaviour, mild punishments (chores) and response cost (loss of privileges).

The programme involves teaching problem-solving and negotiation strategies to alleviate family crises and marital difficulties (Patterson and Chamberlain, 1988).

Combination packages of adolescent-focused interventions

While it is difficult to endorse a positive impact of individual skills programmes such as social and problem-solving skills training, anger management, and training in moral reasoning, there are indications that combinations may be more effective in addressing the multiple cases of conduct disorders.

One package, 'Equipping Youth to Help One Another', brings together anger management, social skills training, moral reasoning training and problem-solving skills training in a group setting (Gibbs *et al.*,

1996). Promising results have been demonstrated with a small sample of incarcerated male offenders aged 15 to 18 years. It was found that a year after release the group recidivism rate was much worse in the control group (41 per cent) than in the intervention group (15 per cent).

School-based interventions

An evaluation of a programme aimed at tackling gang involvement, 'Gang Resistance Education Training', showed significant effects (Esbensen and Osgood, 1999). Law enforcement officers taught a nine-week curriculum to middle school students. It included exercises and interactive approaches intended to underline the consequences of gang violence. Activities taught goal setting, conflict resolution and standing up to peer pressure. Participating students had lower levels of self-reported delinquency and gang membership than a comparison group.

It is all too apparent that conduct disorder has multiple causes. Given this, it is probably too simplistic and too optimistic to expect direct links between school-related variables and delinquency. Yet the school is an important setting for programmes for conduct disorder and delinquency. Therefore, there may be potential for drawing on school-based mental health resources to modify the school environment to change characteristics associated with delinquency (Fonagy *et al.* 2002, p. 171).

Medication

It is argued that medication cannot be justified as the 'first line of treatment' for conduct problems (Fonagy *et al.*, 2005, p. 192). Educators certainly need to be aware of the intended effects and the potential side-effects where medication is prescribed, including any possible impact on learning and other aspects of behaviour. Also, the stronger and better evaluated are other strategies for dealing with disorders of conduct, the less likely the need to consider medication.

Having said this, there is evidence that psychostimulants are effective in reducing antisocial behaviour in adolescents who have both ADHD and attention deficit disorder/conduct disorder. Their effect is independent of the impact of the medication on the attention deficit and the hyperactivity symptoms. Combinations of psychosocial treatments and stimulant treatments appear to be more broadly effective and have a more lasting impact than either on their own. Various drugs are used, including methylphenidate (Ritalin), in the treatment of antisocial behaviour. There

are suggestive indications that clonidine reduces aggressive and destructive behaviour.

Anticonvulsants have been used in the treatment of impulsive behaviour but strong side-effects have been reported. While traditional neuroleptics seem to reduce aggressiveness there are side-effects, including that they sedate the individual and interfere with learning. Atypical antipsychotic drugs appear to reduce aggressiveness but may lead the young person to put on weight.

Summaries of evidence of the effectiveness of these drugs are available (see Fonagy *et al.*, 2005, pp.182–92).

Curriculum and assessment, pedagogy, resources, therapy and care, and organisation

This final section seeks to summarise provision in terms of curriculum and assessment, pedagogy, resources, therapy and care, and organisation.

Curriculum and assessment

The curriculum for pupils with disruptive behaviour disorders may well be at the same academic level as for pupils without a disorder or disability. Nevertheless, if difficult behaviour has led to the pupil having long absences from school, the academic content level may be lower. Where this is the case, the teacher will make every effort to keep the interest level of work age appropriate.

As far as the balance of subjects is concerned, there is likely to be an emphasis on aspects of the curriculum encouraging and supporting appropriate behaviour such as social and personal development. In other subjects, the importance of social and personal development may be stressed. In physical education the importance of rules and why they are followed will be explained, coupled with strategies to help pupils comply.

Also, subjects allowing communication such as drama, debates, and arts subjects may be highlighted. Other areas that may be stressed are those that may have a cathartic effect, such as physical education and drama. Distinctive aspects of the curriculum might include programmes of anger management (for children) and gang resistance education training (for adolescents).

The curriculum may be designed to include extensive opportunities for training in social skills and related skills. Aspects of educational provision can be variously informed by the interventions. In lessons

devoted to or involving personal and social development, sessions may involve:

- the discussion and practice of social skills
- approaches to dealing with anger
- problem-solving skills related to social and personal situations.

This can be part of the more focused provision to develop these skills and attitudes, or it might supplement provision.

In residential special schools, where residential staff and teachers work together to provide a round the clock curriculum, the skills taught can be more consistent. Residential staff working with therapists can adopt positive parenting skills indicated to be effective.

Assessment may use small steps when applied to personal and social development to enable progress to be seen and acknowledged.

Pedagogy

For adolescents, teaching and learning approaches associated with such programmes as gang resistance education training may be used. For children, pedagogy might include anger management coping skills training, social skills training, and problem-solving skills training.

Classroom contingency management may be used, for example with children with conduct disorder, and can allow academic learning to take place where otherwise it would be disrupted.

In day-to-day contact with pupils, teachers will be aware of the importance of the range of skills that are helpful to pupils. These include social skills, anger management, and problem-solving skills. Teachers will therefore want to support and encourage these skills. Pupils can be helped to develop the skills in daily settings, encouraged when they demonstrate the skills and supported when they cannot do so.

Resources

No distinctive resources appear essential for pupils with disruptive behaviour disorders.

Therapy and care

Psychotherapy will be part of provision, for example programmes such as anger management training may be delivered by therapists with specialist training. Medication may be prescribed.

Organisation

Multi-level/multi-agency approaches with adolescents necessitate the school working closely with others. This is likely to involve workers in the youth justice system, mental health professionals, social workers, health professionals and others. The school requires systems that support such multi-agency working, including time being allocated for meetings, telephone contacts and other forms of liaison.

The school setting may include provision for the strategies mentioned. School staff may include therapists and others providing the relevant services, including supporting parents either in the school or at home. Teachers themselves may be trained in the skills and knowledge necessary to provide or support such services. School flexibility can allow multi-modal treatments such as day or residential, short-term or longer term.

Teachers and others in the school may not provide these services directly. In these circumstances, teachers need to be aware of the interventions and be able to work closely with colleagues that do provide them. As part of parent training approaches an important feature is teachers and parents working very closely together.

Where several pupils with conduct disorder are taught together and perhaps live together in residential accommodation, members of staff need to be fully aware of the potential of this contact increasing delinquency. Links with parents or foster parents or residential workers in group homes can support and encourage parent training for children with conduct disorder, and family support for adolescents with conduct disorder.

Other aspects of provision

Among other aspects of provision are parent training (with regard to children), and family-based interventions and Teaching-Family Model in group homes/fostering (with regard to adolescents). For both children and adolescents, multi-agency working is important.

Conclusion

Support for teachers and others working with children and young people with disruptive behaviour disorders is very important. Criteria for classifying disorders of conduct in the Diagnostic and Statistical Manual of Mental Disorders (fourth edition text revision) (DSM-IV-TR) (American Psychiatric Association, 2000) are complex and require those using them to be clear and explicit about the particular criteria that have led to the

assessment. Oppositional defiant disorder and conduct disorder raise various issues of assessment.

Interventions for disruptive behaviour disorders and implications for education differ for children and adolescents. A variety of interventions can be used in schools, or can be used to complement school provision, or can be considered by schools in reviewing their own provision. Medication is one intervention, for example with ADHD. Distinctive provision can be identified in relation to curriculum and assessment, pedagogy, resources, therapy and care, and organisation.

Thinking points

Readers may wish to consider how:

- secure the identification and assessment of disruptive behaviour disorders is in the children and young people with whom they work
- the school might improve the process by which a teacher considers that a child may have disruptive behaviour disorders, within school assessment and the support provided to the school, for example from school psychologists
- the provision indicated by research and professional judgement can be best delivered in a particular school depending on such factors as available staff and their training
- the school can best support and complement intervention taking place elsewhere than the school, for example in the family home or in a clinic.

Key texts

Bloomquist, M. and Schnell, M. (2005) *Helping Children with Aggression and Conduct Problems*, New York, Guilford Press

This book describes interventions found effective with children aged 3 to 12 years with aggression and conduct problems. These include social competence training, parent and family skills building, and school-based approaches. Risk factors and protective factors are also described.

Fonagy, P., Target, M., Cottrell, D., Phillips, J. and Kurtz, Z. (2002) *What Works for Whom? A Critical Review of Treatments for Children and Adolescents*, New York, Guilford Press

As part of the trend for evidence-based treatment, the book presents research evidence of what works. The most substantial chapter,

'Disturbances of Conduct', reviews a wide range of interventions mainly from a therapeutic point of view but also including school-based interventions. Chapter 1 'Introduction and Review of Outcome Methodology' and Chapter 2 'Epidemiology' provide helpful contextual reading.

Larson, J. and Lochman, J. (2005) *Helping School Children Cope with Anger: A Cognitive-Behavioural Intervention*, New York, Guilford Press

This book presents guidance on the 'Anger Coping Program' for 8 to 12-year-old children.

Nelson, W. M., Finch, A. J. and Hart, K. J. (eds) (2006) *Conduct Disorders: A Practitioners Guide to Comparative Treatment*, New York, Springer

This book provides a broad picture of a range of approaches and models that may be used with varying degrees of success with conduct disorder. The practitioners in this case are therapists, but the book covers much that is relevant for teachers and others. Chapters cover description, prevalence and aetiology, psychoanalytical approaches to treatment, family therapy, cognitive-developmental psychotherapy, behavioural treatment, cognitive-behavioural psychotherapy, multi-systemic therapy, continuum of residential treatment care, and comparative treatments.

Tremblay, R. (ed.) (2005) *Developmental Origins of Aggression*, New York, Guilford Press

This book examines the interactions between biological factors, social and environmental effects, and sex differences in adaptive and maladaptive aggression.

Anxiety disorders and depressive disorders

Introduction

Anxiety disorders and depressive disorders may not always be readily recognised, but can exert a strong negative impact on school and home life. This chapter focuses on anxiety disorders (generalised anxiety disorder, obsessive-compulsive disorder, phobias, separation anxiety disorder, and selective mutism), and on depressive disorders (major depressive disorder and dysthymic disorder). The final section summarises provision for curriculum and assessment, pedagogy, resources, therapy and care, organisation, and other matters.

Anxiety disorders

Most anxiety disorders listed in the *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition text revision) (*DSM-IV-TR*) (American Psychiatric Association, 2000) are adult syndromes, although their criteria can also be applied to children. The anxiety disorders listed are:

- generalised anxiety disorder
- obsessive-compulsive disorder
- specific phobia
- social phobia.

The *DSM-IV-TR* also includes, as disorders first diagnosed in infancy, childhood or adolescence:

- separation anxiety disorder
- selective mutism.

Most epidemiological studies at all ages indicate that anxiety disorders are the most common mental disorders (Pine and Klein, 2008, p. 631). Overall for one or more of the various types of diagnosable anxiety disorders prevalence is estimated to be around 8 to 12 per cent of children and adolescents aged 4 to 20 years (for example, Bernstein and Borchardt, 1991). About a third of children with one anxiety disorder also meet the criteria for at least one other anxiety disorder (Strauss and Last, 1993) and a round a third also experience major depression (Bernstein and Borchardt, 1991).

As Pine and Klien (2008) point out, clinical descriptors are the exclusive basis for diagnosis. Different practitioners may interpret these in different ways, and as long as this situation lasts disagreements about the boundaries of definition are likely to persist (Ibid. p. 628). It is possible, through training across different professional groups in an area and close multi-professional working applied to assessment, to reduce the disagreements about definitional boundaries.

Generalised anxiety disorder

Definition

The ‘generalised’ aspect of generalised anxiety disorder indicates the excessive degree of anxiety and that it is dispersed among several focuses for the anxiety. Accordingly, in widely used criteria, generalised anxiety disorder involves excessive anxiety and worry on most days for at least six months concerning several activities or events (American Psychiatric Association, 2000, p. 472 and Criteria A). The worry is hard to control and includes, in children, an additional symptom such as difficulty in concentrating, restlessness or fatigue (Ibid. p. 472).

Prevalence

In a community sample, the prevalence for generalised anxiety disorder was around 3 per cent (Ibid. p. 474). Reviews of epidemiological studies indicate that in children and young people aged 4 to 20 years at onset, 8 to 12 per cent experience one or more diagnosable anxiety disorder (for example, Bernstein and Borschardt, 1991).

Causal factors

Generalised anxiety disorder is a chronic and fluctuating condition but tends to worsen in times of stress.

Identification and assessment

Generalised anxiety disorder is identified and assessed according to criteria such as those outlined. It is also distinguished from states that at first may appear similar, such as non-pathological anxiety (the former interferes significantly with functioning, for example). Commercial assessments also contribute.

Provision

Cognitive-behavioural therapy and other interventions sometimes described as cognitive-behavioural ‘packages’ have effectively treated generalised anxiety disorder and other anxiety disorders in children (Toren *et al.*, 2000). A ‘child-focused treatment’ of anxiety (Kendall, Aschenbrand and Hudson, 2003, pp. 81–100) was used as an intervention for ‘disturbingly anxious’ 8 to 13-year-olds. It involves using child-therapist relationships and ‘education into the physiological signs of anxiety, the normality of anxiety, and behavioural skills’ to help manage anxiety (Ibid. p. 97). An initial educational phase is followed by an exposure phase. The educational phases involves preparation while the exposure phase involves practice.

Individual cognitive-behavioural therapy was compared with individual plus family cognitive-behavioural work (Barrett *et al.*, 1996). Some 76 children aged 7 to 14 years with anxiety disorder were allocated to one of the three conditions. These were as follows:

- cognitive-behavioural therapy only
- cognitive-behavioural therapy plus family management
- waiting list control.

Cognitive-behavioural therapy plus family intervention was found to be the superior condition, confirming earlier research by others that treatment was rendered more effective by adding family management.

A study at the University of Pisa (Muratori *et al.*, 2002) evaluated the effectiveness of a programme for 58 children with relatively mild anxiety disorder or dysthymic disorder (which involves chronically depressed

mood). A treatment group was compared with a control group. Treatments comprised 11 sessions of focal psychodynamic psychotherapy. First, this involved five sessions with the whole family in which the therapist explored the dynamic formulation of the child's conflicts in terms of family relationships. These were followed by five sessions with the child only with the therapist aiming to help the child make connections between his feelings and unconscious conflicts about the relationship with his parents. In the final session for the whole family, the therapist set out again the dynamic formulation of the child's conflicts rooted in family relationships.

The control group was referred for community treatment. The family work, not considered family therapy, was intended to help the therapists in treating the child to focus on relationship issues. Using the Child Behaviour Checklist (Achenbach and Edelbrock, 1983) before the study, 60 per cent of children were in the clinical range. When children were tested later to follow up the effects of the intervention or lack of intervention, 34 per cent in the treatment group were within the clinical range while in the control group the percentage had increased to 65%.

Obsessive-compulsive disorder

Definition

Defining obsessive-compulsive disorder requires being clear about the characteristics of obsession and of compulsion. Obsessions are persistent ideas, thoughts, desires or images that cause significant distress or worry, such as the need to have items in a certain order, thoughts about being contaminated through touching others and impulses to harm others. Compulsions are repetitive behaviours (such as hand washing or touching walls) or mental acts (such as counting to oneself) aimed at reducing anxiety or distress. Children may not always recognise that these actions and thoughts are unreasonable.

Obsessive-compulsive disorder involves recurring obsessions and compulsions that take up more than an hour a day or bring about significant impairment or distress (American Psychiatric Association, 2000, p. 456).

Prevalence

Community studies of children and adolescents have estimated a lifetime prevalence of one to 2.3 per cent, and a one-year prevalence of 0.7 per cent (Ibid., p. 460).

Causal factors

Obsessive-compulsive disorder concordance rate is higher for identical than for non-identical twins, suggesting a hereditary element. A cause that is eliminated in the definition is substance abuse or medication. For a small number of children, obsessive-compulsive disorder may be associated with a group A beta-hemolytic streptococcal infection (such as scarlet fever).

Identification and assessment

The identification and assessment of obsessive-compulsive disorder is linked to criteria already outlined in the section on definition.

Provision

Although medication is used with several anxiety disorders, it appears to be most effective for obsessive-compulsive disorder. The tricyclic antidepressant Clomipramine has been demonstrated to lead to significantly better improvement than a placebo (DeVeugh-Geiss *et al.*, 1992). An antidepressant, as the name suggests, is a drug used to prevent or relieve depression. A tricyclic antidepressant is a group of antidepressant drugs containing three rings in their chemical structure (Anderson, 2007, p. 104). Clomipramine is not used for children or for individuals having experienced recent heart attacks, abnormalities of heart rhythm, elevated mood or severe liver disease. In other instances where such antidepressants are used the patient's heart is monitored because of the small risk of sudden death from cardiac arrest (review by Geller *et al.*, 1999).

More positively, in research involving children and young people aged 8 to 17 years, scores on several measures relating to obsessive-compulsive disorder were significantly lower for those given the selective serotonin reuptake inhibitor fluvoxamine than those given a placebo.

Selective serotonin reuptake inhibitors work as follows. Nerve cells in the brain communicate across a tiny gap between the cells called a chemical synapse. A presynaptic cell conveys information releasing neurotransmitters into the synapse. Serotonin is one of these neurotransmitters. The neurotransmitters are recognised by receptors of the surface of the cell receiving the information. This is known as the postsynaptic cell. The majority of neurotransmitters are released from the receptors and taken up again by monoamine transporters into the presynaptic cell. This process is called reuptake.

Selective serotonin reuptake inhibitors inhibit the reuptake of serotonin. Consequently, serotonin remains in the synaptic gap longer

than normal. The receptors of the recipient cell may repeatedly recognise the serotonin so that the recipient cell is stimulated. In brief then, selective serotonin reuptake inhibitors increase the extracellular level of neurotransmitter serotonin by inhibiting its reuptake into the presynaptic cell so increasing the level of serotonin able to bind to the postsynaptic receptor and stimulating it. Riddle *et al.* (2001) point out that selective serotonin reuptake inhibitors tend to produce less serious side-effects than tricyclic antidepressants.

Cognitive-behavioural therapy, involving exposure and response prevention, is also used. For example, a small-scale open study involved 14 children and adolescents meeting the criteria for obsessive-compulsive disorder. The use of cognitive-behavioural therapy led to 12 of the patients having at least a 50 per cent reduction in the severity of symptoms. These gains were maintained nine months later (Franklin *et al.*, 1998). The treatment of choice for childhood obsessive-compulsive disorder is considered to be a combination of selective serotonin reuptake inhibitor medication and cognitive-behavioural therapy (March, 1999[SKR1]).

Phobias: Specific and social

Definition

The Diagnostic and Statistical Manual of Mental Disorders Text Revision (American Psychiatric Association, 2000) includes criteria for:

- specific phobia (e.g. claustrophobia)
- social phobia
- agoraphobia.

A *specific phobia* is a persistent unreasonable fear of certain situations, activities or objects leading to their avoidance and can bring about distress and disruption of social relationships. While adults tend to recognise the fear as irrational, children may not.

Social phobia involves a marked, persistent and unreasonable fear of social situations or performance situations where the person may be embarrassed (American Psychiatric Association, 2000, p. 450). Exposure to such a situation triggers immediate anxiety. School refusal may be related to school phobia and/ or to separation anxiety where the child fears separating from home.

Agoraphobia is an irrational fear of open spaces. It may or may not be accompanied by panic disorders.

Prevalence

Estimates of lifetime prevalence of phobias range from 3 per cent to 13 per cent (American Psychiatric Association, 2000, p. 453). For specific phobias, in community samples (not just children) estimates of prevalence range from 4 per cent to 8.8 per cent (Ibid. p. 447).

Causal factors

While phobic disorders can begin at any age, typically they start in childhood (Fryer, 1998). The fear of a stimulus (for example, spiders or dogs) is usually present for some time before becoming distressing enough and restricting enough to be considered a specific phobia. Social phobia, which often emerges in the mid-teens, is sometimes preceded by a childhood history of shyness or inhibition.

Identification and assessment

Specific and social phobias are identified and assessed using criteria such as those outlined in the section on definitions.

Provision

Behavioural interventions have long been used effectively for many phobic children (Ollendick and King, 1998, provide a review). Behavioural treatments of circumscribed phobias may involve desensitisation. This may be achieved using either images of what is feared or the actual experience of the object of fear, so called *in vivo* treatment. Childhood phobias have been effectively treated through modelling based on social learning theory (Bandura, 1977). Participant modelling involving *in vivo* exposure and the modelling of exposure by others is especially effective (Blanchard, 1970).

Contingency management drawing on operant conditioning has been shown to be effective with phobias in young children. For example, contingency management has been used for water phobia (Menzies and Clarke, 1993).

School refusal has been treated by so called 'flooding' in which the child is rapidly returned to school. While such treatment has been shown to be effective in the sense that the child has returned to school, concerns have been expressed about the humaneness of such an approach (Fonagy *et al.*, 2002, p. 87). One study, mainly of school refusers of secondary school age, indicated that behavioural treatment led to significantly better rates

of maintenance in school than inpatient treatment and home tutoring (Blagg and Yule, 1984).

Cognitive-behavioural therapy, including gradual exposure techniques, can be effective in treating circumscribed phobias such as school refusal, especially in younger children (for example, King *et al.*, 2001). One randomly controlled trial involved 34 children aged 5 to 15 years with school phobia. Those assigned to cognitive-behavioural therapy showed significantly greater improvement during treatment compared with a waiting list control. The cognitive-behavioural therapy involved six individual therapy sessions over a period of four weeks and a gradual return to school (King *et al.*, 1998).

Separation anxiety disorder

Definition

The DSM-IV-TR (p. 121) defines separation anxiety disorder in relation to several criteria. It is excessive anxiety to do with separation from the home or from someone to whom the child or adolescent is attached (Criterion A). Under other criteria it must last for at least four weeks and begin before the age of 18 years. School refusal may be an indication of separation anxiety.

Prevalence

Estimates of prevalence of separation anxiety disorder average about 4 per cent in children and adolescents but prevalence decreases from childhood to adolescence (Ibid. p. 123).

Causal factors

Separation anxiety may develop after a very stressful life event such as the death of a family member or pet, a change of school or a change of home.

Identification and assessment

Separation anxiety disorder is identified and assessed using criteria such as those outlined in the section on definition.

Provision

Approaches drawing on group cognitive-behavioural therapy may be helpful with children and adolescents with separation anxiety disorder. An open trial of parent-child group cognitive-behavioural therapy for children with anxiety disorders was conducted. Almost all had separation anxiety disorder. Fifty per cent had over-anxious disorder of childhood (now subsumed under generalised anxiety disorder) and/or phobias. Some 24 children and their parents took part in ten sessions using cognitive-behavioural therapy approaches. Seventy per cent of these no longer met the diagnostic criteria by the end of treatment and three years later this applied to 91 per cent (Toren *et al.*, 2000).

Selective mutism (elective mutism)

Definition

The DSM-IV-TR (pp. 125–7) defines selective mutism as a ‘persistent failure to speak in specific social situations’. These are situations ‘where speaking is expected’ and the child does speak in other situations. Situations in which the child might not speak, yet where speaking is expected, include school, or when with playmates. The situations in which the child does speak are typically at home.

The criteria include that the disturbance interferes with educational achievement, occupational achievement, or with social communication. It must last for at least a month and the first month of school should not be counted, as many children are reluctant to speak perhaps because of shyness. If the child does not speak solely because of lack of knowledge of (or lack of ‘comfort’ with) the spoken language required in the social situation, this is not considered selective mutism.

Also, the condition is not diagnosed if the disturbance is better explained by other reasons. These alternative explanations include embarrassment because of communication difficulties such as stuttering. The condition is not diagnosed if it occurs only during a pervasive developmental disorder, that is autism, Asperger’s syndrome, Rett syndrome, childhood disintegrative disorder and pervasive developmental disorder not otherwise specified.

Selective mutism is not diagnosed if it is part of psychotic disorder which is a severe mental disorder associated with abnormal perception and thought processes (Ibid. pp. 125–6).

Selective mutism may be associated with other features. There may be excessive shyness, fear of embarrassment, social isolation and withdrawal,

clinging, compulsive behaviour, temper tantrums, or controlling or oppositional behaviour (particularly at home). Social and school functioning may be severely impaired. While the child usually has normal language skills, elective mutism may be associated with communication disorder (for example, phonological disorder) or a general medical condition causing abnormalities of articulation.

Hospitalisation, extreme psychosocial stressors, or mental retardation may be associated with selective mutism. In clinical settings, children with selective mutism are almost invariably additionally assessed as having an anxiety disorder, for example social phobia (American Psychiatric Association, 2000, p. 126).

Prevalence

It is estimated the prevalence of selective mutism is less than 1% of individuals seen in mental health settings (Ibid. p. 126). It is slightly more common in females than males.

Causal factors

Selective mutism usually occurs before the age of 5 years, although it may not come to the attention of clinicians until the child starts school. It may persist for a few months or for several years. In some instances, particularly where the child has severe social phobia, anxiety symptoms may become chronic (Ibid. p. 126).

Identification and assessment

The criteria outlined in the definition of selective mutism inform the identification and assessment. Also, children with elective mutism may communicate by gesture, nodding or shaking the head, or pulling and pushing. In some instances, the child may communicate in utterances that are short, monosyllabic or monotone or may use an altered voice (Ibid. p. 126).

Provision

Elective mutism is responsive to family-based behavioural treatment (Carr, 2006). This typically involves the child and a family member with whom the child will speak having planned conversations in a setting where the child usually remains mute, for example the school classroom. In this

example, the planned conversation would take place in the classroom when it is empty. Gradually in incremental steps people in whose presence the child does not usually speak in the setting concerned join the child and the family member. In our example this would be other school pupils, the teacher, the classroom assistant and so on.

As the child becomes increasingly able to continue conversation with the family member in the presence of these others, the teacher and pupils gradually take part in the conversation. Eventually, the child and family member move further apart so that in the final stages the child is conversing with others in the classroom with the family member positioned close to the classroom door. Finally the child asks the family member to leave and collect them at the end of the school day (Ibid. p. 521). (See also Sage and Sluckin, 2004.)

Depressive disorders

Definitions and other matters

Among depressive disorders in the *DSM-IV-TR* are *major depressive disorder* and *dysthymic disorder*. In major depressive disorder, there are one or more major depressive episodes (Ibid. p. 369). The depressed mood must be present for most of the day almost every day for at least two weeks. Severity is noted as mild, moderate or severe (with or without psychotic features).

Dysthymic disorder in comparison with major depressive disorder is characterised by less severe symptoms that are present more days than not over at least a two-year period (Ibid. p. 376).

With children and adolescents, the mood may be irritable rather than depressed and the required minimum duration is a year (Ibid. p. 377). In children, dysthymic disorder may be associated with other conditions, including ADHD, anxiety disorders, and conduct disorder. It occurs equally in both sexes and often leads to impaired school performance and social interaction (Ibid. p. 378). While depressed, two or more of other features have to be present to meet the criteria and these include: poor appetite or over eating, low energy or fatigue, low self esteem, and poor concentration or difficulty making decisions (Ibid. p. 380).

In children, depression is comparatively rare, tending to be expressed through anxiety, frustration or somatic complaints (Birmaher, 1996) while adolescents tend to show more biological complaints and thoughts of suicide or actual suicidal behaviour. For children and adolescents diagnosed as having major depression, 40 to 70 per cent have a second

psychiatric disorder and at least 20 per cent have three or more disorders (Ibid.). While there is a high rate of recovery from episodes of depression, there is also a high relapse rate of 50 per cent within two years (Fonagy, 2002, p. 103).

Prevalence

Epidemiological studies of children and adolescents aged 4 to 20 years indicate a point prevalence rate of around 2 per cent for children and 2 to 5 per cent for adolescents for both depression and dysthymia (a mild but long-lasting depression) (Lewinsohn and Clarke, 1999). Until adolescence, depressive disorders are equally distributed among boys and girls. After the age of 14 years, girls predominate over boys by a ratio of two to one.

Causal factors

Major depressive disorder is up to three times as common among the first-degree biological relatives of people with the disorder than it is among the population generally (American Psychiatric Association, 2000, p. 373) suggesting a hereditary element. Dysthymic disorder is more common among first-degree biological relatives of people with major depressive disorder than among the population generally (Ibid. p. 379).

Identification and assessment

Major depressive disorder and dysthymic disorder are identified and assessed using criteria such as those outlined in the section on definition.

Provision

Neither social skills training nor individual child psychotherapy have been demonstrated to be effective treatments for depression (Fonagy et al., 2002, pp. 101–4). However, cognitive-behavioural therapy for adolescents (with the concurrent treatment of any maternal depression), Interpersonal Therapy Adapted for Adolescents, and serotonin reuptake inhibitors look promising. The evidence points to the effectiveness of such interventions for adolescents with mild depression but the picture is less clear for adolescents with severe depression and for children with depression.

Cognitive-behavioural therapy appears effective for treating adolescents with mild or moderate depression whether treatment is provided

individually or in a group. Where there was no response to treatment of the usual duration, providing a longer course of cognitive-behavioural therapy or booster sessions reduced relapse and improved recovery (Clarke *et al.*, 1999).

A series of studies comparing cognitive-behavioural therapy, systemic-behavioural family therapy, and non-directive support for 107 adolescents indicated that cognitive-behavioural therapy showed the greatest improvement particularly for those adolescents also experiencing anxiety. Where the mother was clinically depressed, the treatment outcome for the adolescent was worse and cognitive-behavioural therapy was no better than the other conditions. This leads to the suggestion that any such maternal depression should be concurrently treated (Brent *et al.* 1998). At a two-year follow up, the superiority of cognitive-behavioural therapy had not been maintained.

The 'Primary and secondary control enhancement training for youth depression' programme, used for treating depressed children and young people aged 8 to 15 years, draws on the cognitive-behavioural tradition (Weisz, *et al.*, 2003, pp. 165–83). It takes a two-process model of control and coping:

- primary control
- secondary control.

'Primary control' involves attempts to cope by making objective conditions confirm to one's wishes. These objective conditions might be activities in which one participates and one's acceptance by other people. 'Secondary control' refers to efforts to cope by adjusting oneself to fit the objective conditions. This might involve adjusting one's beliefs, expectations and interpretations of events. The programme involves treatment sessions and assignments that are taken home.

Also, Interpersonal Psychotherapy Adapted for Adolescents appears a promising treatment for adolescent depression (Mufson *et al.*, 1999). Interpersonal psychotherapy is a brief treatment for adults with depression that concentrates on certain interpersonal problems that may underlie the depression. This has been modified and manualised for the treatment of adolescents as Interpersonal Psychotherapy Adapted for Adolescents. A randomised controlled trial included 48 referred adolescents with major depressive disorder and 32 of them completed the programme. The control group was a clinical monitoring waiting list. As evaluated by rating scale scores, 75 per cent of the Interpersonal Psychotherapy Adapted for

Adolescents group recovered compared with 46 per cent of the control group (Ibid.).

Regarding medication, the most promising drugs appear to be selective serotonin reuptake inhibitors, which also appear to have fewer side-effects than alternatives. A randomised double blind placebo controlled trial of fluoxetine was conducted with 96 outpatient children and adolescents aged 7 to 17 years experiencing depression. This indicated fluoxetine was significantly more effective than a placebo (Emslie *et al.*, 1997).

Curriculum, pedagogy, resources, therapy and organisation for anxiety/ depressive disorders

So far, provision for different forms of anxiety disorders and depressive disorders have been considered in terms of medication, and other interventions including cognitive-behavioural therapy. It is now possible to examine provision with regard to the curriculum, pedagogy, resources, therapy, school and classroom organisation, and other aspects.

Curriculum

Aspects of the curriculum that encourage open communication are considered valuable, including personal and social education sessions. Discussions, art, drama, dance, play and other sessions may all afford opportunities for the child to communicate concerns. Regular and ongoing opportunities for the child to communicate any worries are important, with staff trained to listen and respond helpfully. This may include more formal systems such as counselling as well as an ethos in which pupil participation, consultation and communication are paramount.

Structures that may support this include group work, the potential benefits of which include opportunities to share problems and experiences and build up mutual support. The role of the facilitator is central and the facilitating role may need to be explained to pupils and agreed with them. Parental consent is sought and the informed consent of the pupil established (see also Geldard and Geldard, 2001).

An example of group work in schools is that used as part of the Coping in Schools programme in the UK. This included reintegration groups developed in special schools although these were not solely for pupils with anxiety and depression but for a broader group of pupils with 'behavioural and social difficulties' (McSherry, 2001, pp. 34–44).

Circle time is a further approach involving peer group work focusing on sharing perceptions and seeking to deal with any problems as a group (Kelly, 1999). It involves activities, tasks and ‘conferencing’. Everyone is an equal participant of the circle and has an equal right to speak and be heard. Where games are played as part of circle time, there are no winners and no losers. Collaborative tasks are used. Gradually, as members of the circle get to know one another, different topics are introduced. Feelings, or problems associated with different times of the school day, might be examined, for example. Conferencing sessions follow these tasks. Teachers who value circle time speak of it aiding communication, and encouraging positive relationships. It can be used to modify children’s behaviour.

Circle time is said to be able to raise self-esteem and develop a child’s understanding of personal relationships and sensitivity towards them. Such benefits can carry over into other aspects of school life, for example improving group skills in lesson times. For pupils who experience anxiety disorder or depressive disorder, the expectation is that the opportunities to communicate and be part of a group may be beneficial and may help raise self-esteem. The use of circle time to improve communication skills has attracted interest (Nash *et al.*, 2002, *passim*).

Where it is judged appropriate, peer counselling may be used in which trained and supervised students carry out ‘interpersonal helping tasks’ (Hornby *et al.*, 2003, p. 71). The careful selection and training of (usually older) students is important from several perspectives. The counselling student has to be able to devote the required time to the activity, has to be temperamentally suited to it and requires a level of maturity to carry it out effectively. A system of support is needed to ensure that the student can turn to teachers where necessary.

Developing ‘emotional literacy’ includes that it aims to develop the language of feelings, encourages reflection on feelings, taking an interest in the feelings of others and engaging in dialogue about thoughts and feelings (Antidote, 2003, pp. 33–56). This is likely to involve a range of activities that engage pupil’s interests and feelings.

Perhaps such issues can be best summarised in aiming for a ‘listening school’ but the practicalities of how this is made a reality cannot be overlooked. There are implications for extra staffing, and training in counselling-type skills and general supervision skills.

Pedagogy

While there are no specific pedagogic approaches tailored to students with anxiety disorders or depressive disorders, teachers will need to be aware

of the effect of these disorders on learning. A child with anxiety disorders may be less able to concentrate on lessons because of the intrusive effect of anxieties, for example. A student with depressive disorder is less likely to be motivated to take part in activities and learning because of the dampening effect of the disorder. The teacher will need to bear these issues in mind in relating to the child in the classroom.

In educating children with anxiety disorders, and depressive disorders, the teacher and the school will want to be aware of any psychotherapy the child may be receiving and be supportive of it. For example, in educating children with phobia, the nature of the phobia is relevant. Where usual school provision is likely to bring the child into contact with an item or situation that the pupil fears, teachers will need to work with therapeutic staff to determine the approach to be taken so opportunities for close professional liaison are necessary.

A training co-ordinator in a school may wish to consider the basic knowledge and skills a member of staff is likely to need to provide well for pupils with anxiety disorders and depressive disorders. A rolling programme of training involving other professionals as necessary can then be devised and monitored, supplemented by an initial training and induction programme for new staff.

Supervision and support is important in less structured times such as breaks and lunchtimes and the staff mainly responsible for these periods may require special awareness training. Where teachers or other staff in the school are specially trained, they may deliver or contribute to aspects of the psychotherapeutic interventions. In some schools the treatment may take place on the school campus. Where it proves difficult to find therapists trained in the interventions mentioned, the role of teachers is likely to be one of support.

Resources

There appear to be no distinctive physical resources that are essential for pupils with anxiety disorders or depressive disorders. However, some of the provision mentioned in relation to developing opportunities for communication and emotional understanding are supported by materials such as posters and books. There are also assessments, for example of self-esteem, that may be administered before and after intervention to assess any improvements.

Therapy

As indicated in the section on pedagogy, the provision of therapy is an important contribution with teachers and therapists liaising well. Cognitive-behavioural therapy is used for separation anxiety, obsessive-compulsive disorder, and (with family work) for anxiety disorders. For phobia, behavioural methods, social learning (modelling) and cognitive-behavioural therapy are employed. For mild depression in adolescents therapy may comprise cognitive-behavioural therapy with treatment of any concurrent maternal depression, Interpersonal Therapy Adapted for Adolescents, or selective serotonin reuptake inhibitors.

Medication such as selective serotonin reuptake inhibitors may be administered for obsessive-compulsive disorder. Staff need to be aware of any medication taken by children, its likely effects, and its possible side-effects, necessitating liaison between education and health service personnel. This has implications for the school, arranging induction, continuing training and specialist support as necessary for teachers and others.

Organisation

It is important the organisation of the school encourages a calm and reassuring ethos, with teachers aiming to be supportive without being over protective. If care is taken, routines can be predictable and well understood by the child without encouraging further rigidity in behaviour for pupils with obsessive-compulsive disorder. An organisational structure in which pupils as well as staff are encouraged to be supportive is helpful.

Many schools have transition arrangements for any child or young person starting school, coming from another school or area or returning to school after a long absence. This might involve initial visits with parents, a system to ensure that the new pupil has other pupils to help them settle in, procedures to help ensure that the pupil knows what is expected, where to go at different times of the day and so on. Where a student has anxiety disorder or depressive disorder, such arrangements are likely to be especially helpful. An anxious child will require reassurance about changes and periods of transition and opportunities to talk about and understand what is happening.

Clearly where a child experiences school phobia, the staff will seek to ensure school is as welcoming and supportive as possible while still remembering that the phobia is by definition not based on reason. The phobia may relate to a particular child or group of children, a particular

teacher or certain subjects and establishing these will inform the response of the school.

It may be possible to develop special transition arrangement perhaps involving the pupil first attending a unit on the school campus then gradually reintegrating into the rest of the school. Separation anxiety may lead to the child being extremely reluctant to attend school and the school might arrange to provide shorter sessions for part of the day and part of the week to gradually bring the child to return to school. Support for parents also experiencing anxiety can help.

Other aspects

Where family management is provided relating to child anxiety disorders or where the mother of a depressed adolescent is herself depressed, the school will want to do all it can in support. Where schools have facilities for therapy on site this can encourage parents to seek support themselves.

Parents, where they feel harassed by persistent requests from a child with obsessive-compulsive disorder, may require particular understanding and practical support from the school and others. This may require the particular skills of a therapist or social worker, but teachers too will want to be as supportive as they can. Some schools employ a home-school liaison person for a wide range of purposes. In the context of children with anxiety disorder or depressive disorder, such a role may be very helpful to parents.

Thinking points

Readers may wish to consider with reference to a particular school:

- how coherent whole-school provision is, given the range of anxiety disorders and the fact that they often occur together, and given the range of depressive disorders
- training implications for staff if they are to work with children with severe anxiety disorders and depressive disorders
- practical ways in which parents can be supported.

Key texts

General

Rutter, M., Bishop, D. V. M., Pine, D. S., Scott, S., Stevenson, J., Taylor, E. and Thapar, A. (eds) (2008) (5th edition) *Rutter's Child and Adolescent Psychiatry*, Oxford and Malden, MA, Blackwell

This comprehensive text covers conceptual approaches, clinical assessment, influences on psychopathology, clinical syndromes, and approaches to treatment. It has separate chapters on 'Depressive Disorders in Childhood and Adolescence' and 'Anxiety Disorder'.

For anxiety

Chorpita, B. F. (2005) *Modular Cognitive-Behavioural Therapy for Childhood Anxiety Disorders*, New York, Guilford Press

This book describes approaches for treating anxiety using exposure-based techniques.

Rachman, S. (2004, 2nd edition) *Anxiety*, London and New York, Taylor and Francis

A comprehensive introduction to current research and practice, the book covers the nature of anxiety, influences on anxiety, theories of anxiety, the conditioning theory of fear and specific phobias, panic and anxiety, agoraphobia, obsessions and compulsions, social anxiety, and general anxiety disorder.

De Silva, P., Rachman, S. and Rachman, J. (1998) *Obsessive-Compulsive Disorder: The Facts*, Oxford, Oxford University Press

This book covers definitions of obsessive-compulsive disorder, its relationship to other disorders, the effect on family, work and social life, prevalence, theories and explanations, assessment and evaluation, and practical advice.

For depression

Goodyer, I. M. (ed.) (2001, 2nd edition) *The Depressed Child and Adolescent*, Cambridge, Cambridge University Press

Mainly intended for psychiatrists, psychologists and other mental health professionals, this book discusses causes of depression, clinical characteristics and frequency. The importance of life events is considered

and the difficulties around the onset and continuation of depression. The effectiveness of psychological interventions and of medication is covered. Chapters include: 'Suicidal behaviour in adolescents', 'Pharmacology of depressive states in childhood and adolescence', and 'The psychotherapeutic management of major depressive and dysthymic disorders in childhood and adolescence'.

Attention deficit hyperactivity disorder

Introduction

This chapter outlines some of the debates currently relating to ADHD. It presents a definition of the condition and considers its prevalence then looks at its identification and assessment. The chapter outlines some of the other disorders with which ADHD co-occurs and at causal factors.

Turning to provision, it explains some of the main approaches including behaviour management training, parent training, medication and educational approaches.

Some debates concerning ADHD

Debates about ADHD reflect a range of questions and concerns. These may be summarised as to do with:

- shifting responsibility
- family location within society and socialisation
- cultural influences and pressures
- over-zealous medication
- incompatibility between child and environment
- preferred diagnosis when ADHD co-occurs with other conditions

This chapter discusses the possible implications of these issues.

Shifting responsibility

If ADHD is uncritically accepted as a ‘condition’ without sufficient reference to possible family factors and other environmental influences this could be counter-productive. Such acceptance of a ‘condition’ may

displace parental responsibility for a child's unacceptable behaviour. It has been suggested that 'To millions of families, the label [of ADHD] provides a legitimate justification to 'outsource' some responsibilities related to raising children' (Cohen, 2006, p. 12). In the same sort of way, the label may provide an 'alibi' for schools to explain why they cannot make some children fit into their institution (Ibid. p. 13). To some, Cohen's [SKR2] speculations may seem apocalyptic. Neither is it apparent how Cohen knows that 'millions' of families are involved in walking away from their responsibilities.

Yet, if one strips such ruminations of hyperbole, it may still be a point worth considering that some parents and some schools might be looking to convenient labels before examining their own approaches. If this is shown to be so, schools, parents and others could work together more successfully than is often the case. The aim would be to consider other possible explanations of behaviour associated with aspects of ADHD before an identification of the behaviour as ADHD is made. This might include examining the quality of teaching and ethos of the school, the family context and peer relationships as possible contributory factors.

As readers who are teachers may recognise, in practice this is what happens in good schools. A self-critical school will look at organisational, pedagogical and other explanations of apparent difficulties before assuming that a proposed condition might explain the behaviour.

Family location within society and socialisation

Another perspective is that parents may feel obliged to agree to a label and perhaps accept medication for their child because of pressures from a judgemental society. Davis (2006), examining the possible 'social construction' of ADHD (p. 47), explores a top down view of socialisation. This is said to influence the public services of health, education and social care, coercing mothers into co-operating with professionals, for example in defining their child's appropriate behaviour at different age stages.

Davis suggests a 'moral discourse' exists that holds parents, especially mothers, responsible for the decline in moral standards and the child's lack of achievement. Irresponsible parents, especially single and teenage mothers, and breakdown in community ties are seen as part of the explanation of child educational failure. In relation to ADHD this 'discourse' is thought to 'pressurise parents into using drugs to control their children's behaviour' (Davis, 2006, p. 49). Davis concludes that increases in diagnoses of the disorder may be 'an indicator of a wider social problem that relates to a family's location within society' (p. 49). Similarly

it is suggested that society's need for 'good children, normal young people and future productive citizens' underpins the emergence of ADHD (Davis, 2006 p. 52). Therefore, 'medical model solutions' such as prescribing drugs fail to treat the 'root social causes' of the disorder (p. 52).

In this emancipatory speculation, it appears Davis is maintaining that the root social causes of ADHD relate to wanting good children and future productive citizens. It is not clear whether Davis is suggesting that society should instead settle for bad children and unproductive future citizens so society is less demanding of others, especially supposedly oppressed groups. Also a parent may have to wait a long time with a child whose behaviour is very challenging while the supposed root causes of society are put right. If it is the fault of some unspecified 'society', again it is unclear who or what has to change to deal with the issues of which Davies suggests attention deficit disorder is a reflection or a distortion.

Cultural influences and pressures

It has been argued that the apparent increase in ADHD may relate to various cultural influences. These include over-stimulation of the mass media, limited opportunities for active play, and higher expectations of children from an earlier age (Armstrong, 2006, p. 41). Taking such influences into account, the disorder is understood as behaviour over and above what might be expected given such possible influences and that inhibits learning and interferes with daily life activities. Parents may see the use of stimulants for ADHD as a way of helping ensure the child does well in school. Medication may be being used as 'short-term school performance enhancers for children'. If this is so, it should be subject to open discussion rather than being masked behind what some perceive as an 'ostensibly medical condition' (Cohen, 2006, p. 19).

Parental motives are central here. If medication is seen as a performance enhancer in the absence of any difficulty or disorder there is reason to question its use. But if ADHD impairs a child's ability to concentrate and be less active when situations generally require it, this is likely to hinder learning. Should medication control some of this and allow learning to take place then learning is likely to be enhanced. In the latter case it is not necessarily correct that the medication is being used simply to enhance performance although that is its beneficial effect as it allows learning to take place.

The speed at which modern life is lived in developed countries may be affecting the consciousness of children. It has been argued we live in a, 'rapid-fire culture', which leads to both 'rapid-fire consciousness' and, in

the case of children, 'inability to manage their own behaviour'. Consequently, 'sensory addictions develop, motivating us to engage in more stimulus seeking behaviours' (DeGrandpre, 1998 p. 32). However, it is unclear why the purported sensory addiction appears to affect some children more than others. Also, it is not clear whether the classification of ADHD identifies those children whose supposed sensory addiction goes beyond the levels at which usual adaptation is manageable.

Over zealous medicalisation

It has been suggested the identification of ADHD is 'medicalising' deviant and even ordinary behaviour. For example, some of the behavioural signs in the Diagnostic and Statistical Manual of Mental Disorders (fourth edition text revision) (DSM-IV-TR) (American Psychiatric Association, 2000) are, if taken singly, merely aspects of normal childhood behaviour. It is the 'frequency and combination of signs' (Cohen, 2006, p. 16) that is taken to be dysfunctional. Related to this is that no discernable physical abnormality has been securely established for ADHD and that the symptoms can be seen as little more than a list of behaviours that annoy teachers (and parents). It is suggested the diagnosis of this disorder 'cannot have any validity as a label for a genuine biological dysfunction' (Cohen, 2006, p. 21). Another difficulty is that identification can be criticised as only identifying the symptoms in medical terms but not the possible causes of the behaviours because the symptoms are synonymous with the condition.

This is strictly correct so far as obviously identifiable biological dysfunctions are concerned. Even then it ignores indications that something might be at work other than checklists being created of behaviours that annoy teachers, however emancipatory this notion might be. Taylor and Sonuga-Barke (2008) point to the 'male sex dominance, the course of persisting disability, research findings about altered brain structure and function' (Ibid. p. 524) in relation to neurodevelopmental disorders, including ADHD. This, of course, raises other issues about how different neurodevelopmental disorders might be differentiated and the extent to which there is overlap, but it indicates some biological influence.

Even where classifications of conditions do not have clear physiological correlates they may be useful constructs enabling support or more effective education to be provided to the person considered to experience the condition. Autism is an example of a condition thought to have a physiological basis but this has yet to be securely identified.

Incompatibility between child and environment

ADHD has also been seen in terms of a mismatch between a normal child and a normal environment. The child may have a normal temperament and no neurological impairment. However, he may have within normal variations 'low adaptability and low persistence/attention span' (Carey, 2002, p. 23). As Carey states, 'The dysfunction appears to be in the interaction between child and environment, both of which may be normal but incompatible with each other' (Ibid. p. 23).

The difficulty with this argument is that the lower than usual level of ability to adapt, persist and pay attention is not specified. The suggestion is that it is within usual or normal limits, yet this is not what is generally intended by the term ADHD. The behaviour associated with definitions of this disorder are beyond what is considered usual and disrupts learning and other aspects of functioning as a result.

Preferred diagnosis when ADHD co-occurs with other conditions

ADHD may be a preferred diagnosis when it co-occurs with other conditions. For example, about a third of individuals with ADHD develop significant anti-social behaviour problems in adolescence. These problems persist into adulthood leading to criminal behaviour for most of this subgroup (Carr, 2006, p. 423). Also, it has been estimated that 30 to 50 per cent of children with ADHD also have conduct or oppositional disorders (Biederman et al., 1991).

If some of the characteristics of these problems or conditions are unacceptable or uncomfortable for parents and others, a question arises. This is whether an assessment of ADHD is more acceptable than some other potential diagnoses. Perhaps the opportunity to seize on a preferred assessment is able to arise where diagnoses for several conditions including ADHD, conduct disorder and oppositional disorders are unclear and characteristics are similar.

Possible further developments

It is useful to be aware of possible distorting factors that may influence the definition, assessment and provision for ADHD. Nevertheless, some of these arguments are not without their weaknesses, as already suggested. Also, it is necessary to consider within the limits of current understanding the extent to which definitions, assessment and provision are helping

children and young people. For example, it is not easy to completely explain away the evidence of the positive impact of medication in combination with other provision (see later in the chapter) in terms of the purported capitalist exploitation by drug companies, the malign effect of medical 'discourses', and abusive power relationships.

On the other hand, this does not imply that the current understanding of what is called ADHD; its definition, assessment and provision cannot be refined and improved. Furthermore, some of the points raised by critics of the ADHD label require careful consideration. One concern is that the label may lead to shifting of responsibility for parents and schools. Another is that cultural influences such as mass media, limited opportunities for active play, and higher expectations of younger children may be influential. They may be contributing to a general increase in behaviour that is less compatible with the usual requirements of education and an over-identification of apparent ADHD.

ADHD may be over-diagnosed, suggesting more careful assessment and a greater awareness of contributory factors. Some children do seem to experience very severe difficulties that cannot be explained away sociologically or by postmodern discourses. These can be identified by the category of ADHD with potentially helpful implications for provision for the child. At the same time it is possible the supposed condition is over-diagnosed. The challenge is to refine and be more robust about identification after seriously considering alternative explanations and approaches for elements of the behaviour associated with ADHD.

Definitions

Several disorders relate to difficulties concerning over-activity, impulsivity and problems sustaining attention. Among terms that have been used for these are:

- attention deficit disorder
- hyperkinetic disorder
- minimal brain dysfunction
- hyperkinesis
- minimal brain damage
- disorder of attention motor control and perception.

Currently the most widely used term is ADHD. This term emerged from attempts to describe inattentive, overactive and impulsive behaviour. The *DSM-IV-TR* (American Psychiatric Association, 2000,

pp. 85–93) provides a definition of ADHD, which is preferred in the USA and Australia, setting out criteria relating to inattention, hyperactivity and impulsivity.

The nine criteria for *inattention* include ‘often fails to give close attention to details or makes careless mistakes in school work, work or other activities’ and ‘often has difficulty sustaining attention in tasks or play activities’. There are six criteria for *hyperactivity*, such as ‘is often on the go’ or often acts as though ‘driven by a motor’. The three criteria for *impulsivity* include ‘often has difficulty waiting a turn’ (Ibid. p. 92).

The diagnostic criteria state that six or more of the nine criteria for inattention *or* six or more of the nine criteria for hyperactivity-impulsivity should have persisted for at least six months to an extent that is ‘maladaptive and inconsistent with developmental level’. Four further criteria must be met, including that ‘some impairment from the symptoms is present in two or more settings . . .’ such as at school and home, and that ‘some hyperactive-impulsive or inattentive symptoms were present before age 7 years’ (Ibid. p. 92).

Clearly, a child can meet the criteria if he manifests different combinations of inattention, hyperactivity and impulsiveness. He may show:

- six or more of the nine criteria for inattention
- all six criteria for hyperactivity
- all three criteria for impulsivity and three or more for hyperactivity.

These will influence whether the difficulty is seen as predominantly inattention, or hyperactivity or impulsivity with hyperactivity. There is debate about two possible approaches. This first is to combine these potentially disparate profiles under the wider criterion of ADHD. The second is to consider ‘hyperactivity-impulsiveness’ and ‘inattention’ as essentially separate manifestations that may and often do overlap.

Perceptions of hyperactive-disruptive behaviour vary in different cultures. In one study health professionals from Japan, China, Indonesia and the USA were required to rate video clips of 8-year-old boys using standardised rating scales. Chinese and Indonesian professionals gave significantly higher ratings for hyperactive and disruptive behaviours than professionals from other countries (Mann *et al.*, 1992).

Prevalence and co-occurrence with other disorders

In the USA, a Center for Disease Control and Prevention publication states that nearly 7 per cent of children aged 6 to 11 years were reported to have a diagnosis of ADHD (Pastor and Reuben, 2002, p. 3). Prevalence rates in other countries vary. In Italy, the estimated prevalence among children aged 6 to 15 years is 1 to 2 per cent (Bonati, 2006, p. 131).

The variation may relate to which diagnostic criteria are used, how strictly they are applied and the positioning of cut-off points. A higher ratio of boys to girls is reported for ADHD in relation to children considered to have predominantly hyperactive behaviour, predominantly impulsive behaviours, or those with both. However, some of this may be owing to referral bias. The peak age for referral is between 7 and 9 years old.

About a third of individuals with ADHD develop significant anti-social behaviour problems in adolescence, including conduct disorder and substance abuse. For most of this sub-group the problems continue into adulthood, leading to criminal behaviour (Carr, 2006, p. 423). Similarly, an estimated 30 to 50 per cent of children with ADHD also have conduct or oppositional disorders, 15 to 75 per cent have mood disorder, and 25 per cent anxiety disorder (Biederman *et al.*, 1991).

Such co-occurrence is important because some interventions have different implications for children with different co-occurring disorders. For example, psychostimulant drugs such as methylphenidate (Ritalin) are effective with regard to inattention, impulsivity and hyperactivity in the classroom. However, where anxiety or depression co-occur with ADHD, it is necessary to be careful in prescribing because such medication may aggravate these emotional problems.

Causal factors

Possible causal factors are genetic, physiological, psychological and environmental. ADHD is more common in the biological relatives of children having ADHD than in the biological relatives of children who do not. Twin studies show a greater incidence of ADHD among identical twins than non-identical twins.

Studies comparing the incidence of ADHD among children whose parents are biologically related with that of the children of parents where the child was adopted indicate a greater probability of ADHD appearing in parents and children when they are biologically related (Tannock,

1998). All this suggests biological factors may predispose children to the condition.

Another suggestion is that ADHD may be related to dysfunction in the brain's neurotransmission system, which is responsible for making connections between different parts of the brain. In individuals with the disorder, brain-imaging research has indicated abnormalities in the frontal lobes where systems responsible for regulating attention are centred. Giedd and colleagues (2001, p. 44) in reviewing neuroimaging studies, maintain these suggest, for ADHD, the involvement of right frontal-striatal brain circuitry and that the cerebellum has a 'modulating influence'.

In 20 to 30 per cent of instances, particularly in severe cases of ADHD, such physiological features are caused by brain disease, brain injury, or exposure to toxins such as alcohol or other drugs. Where stimulant drugs such as methylphenidate are effective in reducing hyperactivity, this may indicate that hyperactivity results from an under-arousal of the mid-brain, leading to inefficient inhibition of movements and sensations. Stimulant drugs may stimulate the mid brain sufficiently to suppress the over-activity.

One psychological theory is that there is a dysfunction of the psychological mechanism for self-regulation. This leads to the child with ADHD having particular difficulty in delaying a behavioural response. Another view is that characteristics of individuals with ADHD lead to difficulties with executive functions involving the mental filtering and checking processes that an individual uses to make decisions about how to behave. They involve (Barkley, 1997):

- using inner speech (which may evaluate information held in the working memory)
- taking one's emotional state into account
- recalling knowledge from situations similar to one's current situation.

Another theory questions the accuracy of the term 'ADHD'. Evidence is cited suggesting there is in fact no deficit in attention in the sense that attention is in limited supply. Instead, there appears to be a deficit in the allocation of attentional resources as an aspect of executive function. The overarching executive function of self-control is thought to be a common feature explaining two characteristics of ADHD. The first is the apparent inattentiveness, which is an aspect of cognitive control. The second is the hyperactivity/impulsivity, which is an aspect of social-emotional control (Cutting and Denckla, 2003, p. 126).

Environmental factors, including family influences, may mediate other factors in influencing the probability of ADHD. One study found that a child with the disorder was more likely to have a mother with symptoms of anxiety or who had been recently seriously depressed, than were other children. Where a child had ADHD and co-occurring conduct disorder and oppositional defiant disorder, the father tended to score higher on measures of neuroticism and lower on measures of agreeableness than fathers in a comparison group (Nigg and Hinshaw, 1998).

In a bio-psych-social model, a tentative picture of ADHD emerges. There may be differences in the brain morphology of individuals with ADHD and others, which may lead to cognitive differences in terms of how easily an individual can inhibit responses to stimuli. A particular child's circumstances, and his other skills and capacities, are likely to influence whether these cognitive factors lead to difficulties characterised as ADHD (See also Nigg, 2006).

Identification and assessment

Criteria such as those already explained are used in identifying and assessing ADHD as part of wider assessment procedures. Ideally this involves bringing together information from different sources (child, parent, peers, teacher and other professionals) on how the child functions in different circumstances and settings.

Qualitative assessments include interviews, or using questionnaires for the child, members of the family, peers and teachers. Quantitative assessments may involve psychological, medical and educational information perhaps using standardised tests of cognitive performance, computerised tests of attention and vigilance, and a medical examination including tests of hearing and vision (Cooper and O'Regan, 2001, p. 91).

Functional behavioural assessments for a child with ADHD can be informative and can have implications for provision. The teacher, parent, school psychologist and others may observe the child in different settings and hypothesise about his behaviour. What function is served for the child by being out of his seat often in class when he is meant to be working or at home when he is meant to be eating at the table? What function is served by the child's work being untidy? (Perhaps it is finished quickly.)

Such observations and hypotheses can suggest ways of modifying the classroom setting to increase the behaviour that is required. This might be producing written work of an acceptable level of neatness and legibility within the child's academic capability. It might suggest the need to teach

new skills. It can be beneficial to co-ordinate such approaches consistently across several settings.

Various commercially produced assessments and rating scales are available from test suppliers that seek to indicate ADHD. Early identification and intervention tends to improve the outcome.

Provision

Curriculum and assessment

The condition or lack of provision for it may have led to lengthy periods out of school, when the child may have fallen behind in school subjects. Even when the child has attended school regularly, poor management of ADHD and associated lack of attention to lessons may lead to lowered attainment. Consequently, the level of the curriculum may need to be lower than age-typical while its content maintains an age-appropriate interest level.

The curriculum may focus on literacy and numeracy skills, study skills training and computer skills to help the pupil gain fuller access to the curriculum and to build self-esteem in basic achievements. Practising motor skills has also been recommended for children with ADHD/deficits in attention, motor control and perception (Gillberg, 1996).

There is likely to be an emphasis on social skills training in discrete subject sessions such as 'personal and social development' and in aspects of other subjects such as drama (for example, role-play). There may be discrete sessions for behaviour management training. This has implications for curriculum flexibility and such sessions may need to be given priority before much progress in broader aspects of the curriculum is made.

Pedagogy

In general, classroom instructional approaches are very important in helping the pupil with ADHD. Providing good structure, short assignments with immediate feedback, clear directions, and appropriate schedules of reinforcement are powerful techniques.

Concrete experience and active, experiential learning

A pupil with ADHD may favour concrete experience over more abstract conceptualisation. He may prefer active, experiential learning to reflective

observation (Wallace and Crawford, 1994). These preferred experiences and approaches to learning can be optimised. This indicates that a pupil with ADHD is likely to learn best in participative drama, role-play, and practical activities such as aspects of science and technology.

Subjects normally involving abstract conceptualisation and reflective observation can be approached through concrete experience and active learning and supported by a continuation of these underpinnings. This recognises the requirement for activity in pupils with ADHD. It helps attention and concentration because the physical and concrete constitute the medium of learning and at the same time act as multi-sensory prompts and aids. Remedial teaching is important, focusing on helping the child rectify areas of academic attainment in which he has fallen behind such as reading, spelling and arithmetic.

Behaviour management training

It appears behavioural interventions are less effective on their own than stimulant medication. However, the use of behavioural methods can enable the dose of medication to be reduced while still achieving similar improvements. Behaviour management training was one of the interventions (the other being the psychostimulant methylphenidate) in a trial of the effects of single and combined treatments on the classroom performance of children with ADHD. Performance was defined in terms of classroom behaviour, accuracy and academic productivity (Carlson *et al.*, 1992). An eight-week programme involved 24 boys aged 6 to 12 years, and two doses (0.3 mg and 0.6 mg) of methylphenidate (Ritalin) were crossed with two classroom settings:

- behaviour modification (token economy, time out and home report card)
- a classroom setting that did not use behaviour modification.

A combination of behaviour therapy and 0.3 mg of methylphenidate provided the maximal behaviour modification, nearly the same as 0.6 mg of methylphenidate alone.

A response cost approach (for example, the loss of previously gained reward earning points) has been indicated to be effective with ADHD. This has been incorporated into an Attention Training System, a feedback module operated by battery and placed on the child's desk. It displays the running total of points a child has earned in a specified interval. For each minute the child is on task, a point is added. Each time the teacher sees

the child off task, she presses a remote control button illuminating a red light on the module telling the child a point has been deducted. At the end of the agreed period, the points are totalled and traded for a reward such as free time.

Behaviour management can also be linked to the implications of functional behavioural assessment. The pupil may produce sloppy work when academically capable of producing better. A functional behavioural analysis may lead to a hypothesis that the function of this for the child is to enable him to finish the work quicker so he can physically move to other activities. This might lead to the environment being modified to enable the work to be produced more neatly. The teacher might agree with the pupil that the work be done in two parts with a brief physical break in between. The teacher would monitor the approach to ensure the objective was reached so the hypothesis would be confirmed or disconfirmed.

Booster sessions and the reinforced opportunity to use the skills in the setting they are required may be used to encourage generalisation. Also, the schedules of reinforcement can be gradually changed to move increasingly to the natural reinforcement more typically found in the classroom. This could be a move from tokens or tangible rewards to teacher praise.

The teacher may use unobtrusive methods, aiming to encourage attention and concentration and discourage impulsivity and over-activity. The pupil may be seated so the teacher can see whether the pupil is giving attention. The teacher can then encourage attention by using some previously agreed unobtrusive signal. Also, through discussion and sensitive 'feedback' about his behaviour, the pupil can be helped to recognise various feelings such as frustration, anger and disappointment and develop a vocabulary enabling him to communicate these.

Cognitive-behavioural approaches using behaviour management techniques combined with self-monitoring and problem-solving training appear to have no advantages over behaviour modification with regard to academic performance. Both behaviour modification alone and cognitive-behavioural therapy alone are less effective than stimulant medication.

Biofeedback

Biofeedback involves the pupil monitoring the physiological manifestations of his psychological processes. An instrument is used that responds to physiological changes and emits a signal such as a sound tone. This enables the individual to respond to the physiological changes and try to control them.

In hyperactivity, the biofeedback signal is activated by high muscle tension, enabling the child to become aware of this and use relaxation exercises to reduce the tension and relax. Drawing on cognitive behavioural approaches, pupils may be taught to monitor their own behaviour and prompt themselves to keep track of how they are responding.

Social skills teaching and developing compensatory skills

For children with ADHD, social skills may be underdeveloped or lacking. The child may show aggression, further impairing popularity with peers and others. Social skills – for example, conversational skills such as timing and showing interest in what others say – can be improved through training to establish and reinforce them. Methods include discussion, role-play, and staff or other pupils modelling desired behaviours in both day-to-day contact and structured sessions (Hargie *et al.*, 1994).

Skills and behaviours are explicitly taught that concern the ability to concentrate, give attention, manage impulses and deal with social interactions (Kadesjö, 2001). Cousins and Weiss (1993) reviewed behavioural and cognitive behavioural methods, and parent training and social skills training for children. A child's peers may not always accept him even after his social skills training, and involving peers in social skills development might improve the likelihood of acceptance.

Better pupil participation

Davis (2006) argues that approaches to ADHD 'do not sufficiently engage with the sociological issues that influence children's and young people's lives'. Consequently, approaches may not give enough consideration to how a child can 'take charge of resolving their own life issues' (Ibid. p. 45). Alternative social solutions might include 'restructuring the school system' (Ibid. p. 52).

Also, children can be 'encouraged to define their own life problems that have led to them being labelled with ADHD and reflect on the solutions to their experiences' (Ibid. p. 56). Consulting children and including them as participants in the management of ADHD is suggested (Ibid. p. 57). The term 'agency' is sometimes used to convey this sense of developing autonomy.

Resources

No distinctive physical learning resources appear essential for pupils with ADHD beyond those required for biofeedback training, although physical aspects of classroom layout are relevant.

Therapy/care

In the USA, around 90 per cent of pupils with ADHD receive medication (Greenhill, 1998). In the UK, the figure is about 10 per cent (Munden and Arcelus, 1999), and of these less than 6 per cent are administered methylphenidate (Ritalin) (National Institute of Clinical Excellence, 2000). The effectiveness of psychostimulant drugs such as methylphenidate suggests hyperactivity results from under-arousal of the mid brain. This seems to cause insufficient inhibition of movements and sensations. Stimulant drugs appear to stimulate the mid brain sufficiently to suppress the over-activity. Stimulants can therefore act by improving the child's ability to concentrate when hyperactive behaviours are inhibited.

Electrophysiological investigations using neuroimaging have indicated that children taking Ritalin pay better attention to auditory and visual stimuli (Seifert *et al.*, 2003). Ritalin is administered orally in tablet form usually in the mornings and afternoons and is not used with children under 4 years old. It is contraindicated where there is a high risk of cardiovascular disease, or tic disorders such as Tourette syndrome. Side-effects can include insomnia and temporary loss of appetite.

Medication aims to improve the child's receptiveness, enabling him to learn more appropriate behaviours and skills such as better self-regulation. It is used in combination with other approaches such as behavioural interventions. A thorough assessment is necessary before medication is given and effects should be monitored at school and at home.

Organisation

Breaks and structure

Arranging optimum breaks from classwork tends to help reduce inattention and allow for the need for activity associated with impulsiveness. It appears there is a relationship between having insufficient time for breaks from classwork and increases in pupils' disruption and inattention (Pellegrini and Horvat, 1995; Pellegrini *et al.*, 1996). This suggests that frequent short periods of physical activity interspersed with other work should improve attention.

Some research indicates pupils with ADHD can sustain effort and concentration in structured and controlled situations where the activity is stimulating, but find it particularly difficult to return to an activity once distracted (Borger and Van der Meer, 2000). This suggests these pupils are likely to benefit from a structured, controlled environment, for example with predictable schedules, stimulating learning tasks, and minimal distractions.

Accordingly, a Swedish researcher recommends children with ADHD/deficits in attention, motor control and perception have breaks at regular intervals and short periods of concentrated work. For children in early school years the concentrated work might be for just a few minutes (Gillberg, 1996).

Classroom layout

One recommended approach for children with ADHD/deficits in attention, motor control and perception is for the children to be taught in small groups (Gillberg, 1996). Where this is done, the teacher needs to carefully consider the layout of the classroom and the general nature of the classroom environment. On the one hand, the environment should enable the child with ADHD to avoid distractions. On the other hand, the surroundings do not have to be bleak.

A pupil with ADHD is likely to concentrate better if seated away from windows, displays and other potential distractions. These features can be distracting for most children and young people but are especially likely to interrupt the concentration and learning of a pupil with ADHD. At times, performance may be improved if the pupil works in an area facing a wall with partitions on either side. In this situation the teacher should be able to see the pupil from the back and monitor whether he is carrying out the required activity (Cooper and O'Regan, 2001, p. 47).

Where discussion is part of a lesson, a pupil with ADHD may be less distracted working in a pair rather than in a larger group. Nevertheless, opportunities for the pupil to participate in larger groups of perhaps six pupils should not be ignored and can work satisfactorily if the task is well structured.

Routines, sequences and duration

Providing clear routines that help him deal in a step-by-step way with the requirements of the school day can reduce a pupil's difficulty with attention and organising information. For pupils with ADHD, complicated

timetabling arrangements can cause real challenges. Faced with the lack of regular pattern or a complicated pattern of lessons that emerges only over several weeks, the pupil is likely to require practical support. Among particularly confusing features might be rotating sessions each semester/term. These include features such as different aspects of a technology subject, or blocked subjects such as a 'French week'.

Secure but not over-rigid routines are intended to help a child with impulsive worries, and thoughts and feelings of insecurity so that the pupil knows what to expect. The idea is that over time, routines help the pupil internalise controls. Visual reminders of a task may be posted on the pupil's desk or a nearby wall to help him remember the sequence of activities. For example, this might be in the form of a picture or a series of pictures.

A pupil with ADHD tends to find sequences and sequencing difficult. Accordingly, the teacher will help if she gives clear guidance and instructions in manageable chunks. This can be reinforced as necessary by written and pictorial aids. She should ensure the pupil understands what is required through asking questions or encouraging him to indicate when requirements are unclear.

Helping the pupil develop an understanding of duration tends to reduce inattention and perhaps impulsivity. The teacher may set tasks with clear time limits that are conveyed to the pupil rather than having too many open-ended tasks. This can enable the pupil to structure time better in aiming to complete the task. A clock or sand timer can help some pupils recognise the passage of time involved in an activity. This assumes, of course, that the time allocated realistically matches the demands of the task and the pupil's capacity to concentrate for the required duration.

Criticisms of organisation involving separation and structure

A setting in Sweden of a classroom for six children aged 6 to 9 years with ADHD/deficits in attention, motor control and perception is critically described by Hjärne (2006, p. 180). It involved a high pupil/teacher ratio of six pupils and three teachers with two assistants, desks along the wall separated from one another, and shields to separate the pupils. There was an extra classroom available if it proved necessary to separate a pupil from others.

Hjärne's concern was that the expectations of the children did not appear to be extended as they worked in the separate class. For example, they were not expected to work for longer periods or work more

independently. Also, tasks did not appear to always engage with the pupils' interests. This suggests that for pupils with ADHD the teacher monitors the length of concentration and independent work to ensure progress and to extend teachers' expectations.

Other provision

Parent training and support

Training programmes have been developed for parents of children with ADHD using a cognitive-behavioural approach. One involves teaching parents special child management techniques and providing them with information about ADHD.

Cognitive therapy techniques were used to aid the parent's acceptance, management and understanding of the disorder (Anastopoulos and Farley, 2003, pp. 187–203). Parent training combined with medication was superior to medication alone in some circumstances. The combined intervention was better for some outcomes such as family functioning, and for certain types of children (for example those that are also anxious) and their families (Ibid. p. 202). Parent training appears to increase the child's compliance and shortens task completion time. It also tends to improve the parent's self-esteem as they learn to cope better and reduce parent stress.

Not all families are able to meet the requirements of parent training and its persistent application. For these families as well as for others with children with ADHD, more general support is clearly important. It may include respite care, extra assistance in the family home and practical help through family aides.

Diet

While food allergy is popularly believed to be a common cause of hyperactivity, research studies indicate it is involved only rarely. Among exclusionary diets is the Feingold diet (Feingold, 1975). Its rationale is that some research has linked food additives to allergies and that hyperactivity may be a symptom of an allergic reaction. The diet seeks to eliminate the intake of salicylates found in certain fresh fruits and vegetables, food flavourings, food colourings and in some preservatives.

Fonagy *et al.* (2002, p. 217) reviews available studies and concludes there is 'no good evidence' for rigorous exclusion diets despite one study (Feingold, 1975) suggesting around 5 per cent of hyperactive children show

behavioural and cognitive benefits with an additive-free diet. However, if parents observe adverse reactions to a certain food, it may be worth considering a trial period of excluding it.

Thinking points

Readers may wish to consider:

- how valid and reliable are the arrangements for identifying and assessing ADHD in the reader's setting (for example, school, local authority)
- the extent to which a range of well thought-out approaches for ADHD is in place and how these might be further developed.

Key texts

Barkley, R. A. (2006a) (3rd edition) *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment*, New York/London, Guilford Press

This book is intended mainly for mental health professionals but there is also much to interest teachers and others. Parts cover the nature of ADHD, assessment, and treatment. The treatment part includes chapters on 'Counselling and Training Parents', 'Treatment of ADHD in School Settings', and 'Student-mediated Conflict Resolution Programmes'.

Barkley, R. A. (2006b) *ADHD in the Classroom: Strategies for Teaching*, New York/London, Guilford Press

This source is in DVD and video format and, as the title suggests, shows teaching strategies for ADHD in the classroom.

Lloyd, G., Stead, J. and Cohen, D. (eds) (2006) *Critical New Perspectives on ADHD*, New York, Routledge

This book presents criticisms of approaches to the identification and treatment of ADHD drawing on notions such as the construction of 'medical discourse', labelling, and adult-child power relationships.

Nigg, J. T. (2006) *What Causes ADHD? Understanding What Goes Wrong and Why*, New York, The Guilford Press

Draws on neuropsychological research to indicate the multiple genetic and environmental pathways by which ADHD develops.

Weyandt, L. L. (2007) (2nd edition) *An ADHD Primer*, New York, Taylor and Francis

This book summarises ADHD literature across the lifespan, drawing out practical information and approaches for school and home.

Internet

Internet sites may act as a starting point for further searches. In the USA, an example is the Attention Deficit Disorder Association (www.add.org). In the UK, an example is the Attention Deficit Hyperactivity Disorder website (www.btinternet.com/~black.ice/addnet/).

Summary and conclusion

Emotional and behavioural disorders and areas of provision

This book examined approaches considered effective in educating and encouraging the development of children and young people with:

- disruptive behaviour disorders
- anxiety disorders and depressive disorders
- attention deficit hyperactivity disorders.

For each it was maintained that there are particular implications for provision. This was considered in terms of:

- the curriculum and related assessment
- pedagogy
- resources
- school and classroom organisation
- therapy and care.

Pedagogy and approaches

Pedagogy considered included behavioural approaches. Examples are:

- learning theory as developed by Thorndyke on learning by trial and accidental success
- classical conditioning illustrated by the work of Pavlov
- conditioning emotional responses with reference to the early work of Watson
- operant conditioning developed by B. F. Skinner.

Other strategies are observational learning and modelling through Bandura's work and social cognitive theory.

The book considered various perspectives:

- systems
- psychodynamic
- cognitive-behavioural approaches.

Provision for particular disorders

Disruptive behaviour disorders

I began this chapter with a note about the importance of support for teachers and others involved in educating pupils with these disorders. Drawing on the classifications in the *Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition Text Revision) (DSM-IV-TR)* (American Psychiatric Association, 2000), I considered oppositional defiant disorder and conduct disorder. I commented on the criteria for conduct disorder and related issues.

In examining interventions for disruptive behaviour disorders and implications for education, the chapter distinguishes approaches relevant for children (3 to 10 years) and those for adolescents (10 to 17 years). Interventions have been developed that can be used in schools, could be used to complement school provision or which suggest schools could learn from the effectiveness of these interventions in reviewing their own provision. The question of medication is then considered.

Anxiety disorders

In this chapter I drew on the DSM-IV-TR (Ibid.) to look at:

- generalised anxiety disorder
- obsessive-compulsive disorder
- specific phobia
- social phobia
- separation anxiety disorder
- selective mutism.

For generalised anxiety disorders (and other anxiety disorders) in children, cognitive-behavioural therapy and other interventions sometimes described as cognitive-behavioural 'packages' have been used

effectively (Toren *et al.*, 2000). A study at the University of Pisa (Muratori *et al.*, 2002) indicated the effectiveness of focal psychodynamic therapy with children with relatively mild anxiety disorder or dysthymic disorder.

With regard to childhood obsessive-compulsive disorder, the treatment of choice

is considered to be a combination of selective serotonin reuptake inhibitor medication and cognitive behavioural therapy (March, 1999).

Turning to phobias, behavioural interventions are used effectively for many phobic children (Ollendick and King, 1998). Behavioural treatments of circumscribed phobias may involve desensitisation. Childhood phobias have been effectively treated through modelling based on social learning theory (Bandura, 1977). Participant modelling involving *in vivo* exposure and the modelling of exposure by others is especially effective (Blanchard, 1970). Contingency management drawing on operant conditioning has been shown to be effective with phobias in young children (for example, Menzies and Clarke, 1993). School refusal has been treated by so-called 'flooding' in which the child is rapidly returned to school but this raises ethical issues (Fonagy *et al.*, 2002, p. 87). With school refusers of secondary school age, behavioural treatment can produce significantly better rates of maintenance in school than inpatient treatment and home tutoring (Blagg and Yule, 1984). Cognitive-behavioural therapy, including gradual exposure techniques, can be effective in treating circumscribed phobias such as school refusal, especially in younger children (King *et al.*, 1998; King *et al.*, 2001).

For children and adolescents with separation anxiety disorder, approaches involving group cognitive-behavioural therapy may be helpful (Toren *et al.*, 2000).

Elective mutism is responsive to family-based behavioural treatment (Carr, 2006; Sage and Sluckin, 2004).

Depressive disorders

For depressive disorders, cognitive-behaviour therapy for adolescents (with the concurrent treatment of any maternal depression), Interpersonal Therapy Adapted for Adolescents, and serotonin reuptake inhibitors look promising. The interventions appear to be effective for adolescents with mild depression but research is not as comprehensive for adolescents with severe depression and for children with depression (Clarke *et al.*, 1999; Brent *et al.* 1998; Weisz *et al.*, 2003; Mufson *et al.*, 1999; Emslie *et al.*, 1997).

Curriculum, pedagogy, resources, and organisation for pupils with anxiety disorder and depressive disorders

There are various developments in the curriculum that can benefit pupils with anxiety disorders or depressive disorders. Aspects of the curriculum that encourage open communication are considered valuable, including personal and social education sessions. Discussions, art, drama, dance, play and other sessions may allow opportunities to communicate concerns. Regular and ongoing opportunities for the child to communicate any worries are important, with staff trained to listen and respond helpfully. Circle time can help with its use of peer group work focusing on sharing perceptions and seeking to deal with any problems as a group (Kelly, 1999; Nash *et al.*, 2002, *passim*). Peer counselling may be used (Hornby *et al.*, 2003, p. 71).

While there are no specific pedagogic approaches tailored to students with anxiety disorders or depressive disorders, teachers will need to be aware of the effect of these disorders on learning. A child with anxiety disorders may be less able to concentrate on lessons because of the intrusive effect of anxieties. A student with depressive disorder is less likely to be motivated to take part in activities and learning. The teacher will need to bear these issues in mind in relating to the child in the classroom.

Regarding physical resources, some of the provision mentioned in relation to developing opportunities for communication and emotional understanding are supported by materials such as posters and books. Assessments of self-esteem may be administered before and after intervention to assess any improvements.

It is important the organisation of the school encourages a calm and reassuring ethos, with teachers aiming to be supportive without being over-protective. Routines can be predictable and well understood by the child without exacerbating obsessive-compulsive disorder. An organisational structure in which pupils as well as staff are encouraged to be supportive is helpful.

Where family management is provided relating to child anxiety disorders or where the mother of a depressed adolescent is herself depressed, support from the school is helpful. Where schools have facilities for therapy on site this can encourage parents to seek support themselves.

Attention deficit hyperactivity disorder*Curriculum and assessment, pedagogy, resources, therapy/ care, organisation and other provision*

Where the pupil has been absent from school for long periods and where difficulties with concentration have slowed previous progress, the level of the curriculum may need to be lower than age-typical while its content maintains an age-appropriate interest level. A key priority may be literacy and numeracy skills, study skills training, and computer skills to help the pupil gain fuller access to the curriculum and to build self-esteem in basic achievements. Practising motor skills has also been recommended for children with ADHD/deficits in attention, motor control and perception (Gillberg, 1996).

Pedagogy is very important in helping the pupil with ADHD. Providing good structure, short assignments with immediate feedback, clear directions and appropriate schedules of reinforcement are powerful techniques. A pupil with ADHD may favour concrete experience over more abstract conceptualisation. He may prefer active, experiential learning to reflective observation (Wallace and Crawford, 1994). Also important are behaviour management training and biofeedback techniques. For children with ADHD, social skills may be underdeveloped or lacking. Social skills can be improved through training to establish and reinforce them. Methods include discussion, role-play, and staff or other pupils modelling desired behaviours in both day-to-day contact and structured sessions (Hargie *et al.*, 1994). Efforts are made to improve the pupil's participation in learning and decision-making.

Special resources may be used for biofeedback training, and physical aspects of classroom layout are relevant.

Medication aims to improve the child's receptiveness, enabling him to learn more appropriate behaviours and skills such as better self-regulation. It is used in combination with other approaches such as behavioural interventions. A thorough assessment is necessary before medication is given and effects should be monitored at school and at home.

Effective school and classroom organisation relevant for pupils with ADHD include arranging optimum breaks from classwork which tends to help reduce inattention and allow for the need for activity associated with impulsiveness (Pellegrini and Horvat, 1995; Pellegrini, Hubertey and Jones, 1996). One recommended approach for children with ADHD/deficits in attention, motor control and perception is for the children to be taught in small groups (Gillberg, 1996). Clear routines, help in understanding sequences and duration are also helpful.

Training programmes have been developed for parents of children with ADHD using a cognitive-behavioural approach. One involves teaching parents special child management techniques and providing them with information about ADHD (Anastopoulos and Farley, 2003). While food allergy is popularly believed to be a common cause of hyperactivity, research studies indicate it is involved only rarely.

A final word

The above summary of provision for different types of disability and disorder that have been examined in this book indicates the importance to schools of reviewing their curriculum, pedagogy, resources, organisation and therapy. In doing so school will be able to ensure that provision helps encourage the best academic progress and the best personal and social development for its pupils.

Another essential aspect of special education that has been implicit throughout the book is that of professionals working closely with parents and other professionals. It is helpful to recognise the importance of professional contributions and the foundational disciplines that contribute to special education. Examples of these foundational disciplines are:

- legal/typological
- terminological
- social
- medical
- neuropsychological
- psychotherapeutic
- behavioural/observational
- developmental
- psycholinguistic
- technological
- pedagogical.

Legal/typological foundations of special education concern social, political and economic factors informing the context of special education legislation. This includes an understanding of current legislation and the main types of disabilities and disorders, drawing on classifications used in the systems in the country concerned. Terminological matters include the importance of terminology in special education, for example 'needs', 'discrimination' and 'rights'. Social foundations include a social constructionist perspective. A social view of disability has been important in

widening the understanding beyond individual factors. Medical influences involve the scope of the application of medical perspectives and the use of drugs in relation to children with disabilities and disorders.

Neuropsychological aspects draw on techniques used in neurological research and some uses of psychological and related tests in neuropsychology. Psychotherapeutic contributions involve systems, psychodynamic and cognitive-behavioural approaches. Behavioural and observational foundations consider behavioural approaches to learning with reference to learning theory and observational learning and modelling in social cognitive theory. Developmental features may draw on Piaget's theory of genetic epistemology, for example in relation to understandings of provision for children with cognitive impairment.

Psycholinguistic foundations involve frameworks incorporating input processing, lexical representations, output processing, and interventions. Technological aspects may explore how technology constitutes a foundation of special education through its enhancement of teaching and learning. Pedagogical aspects examine pedagogy in relation to special education, in particular the issue of distinctive pedagogy for different types of disabilities and disorders.

Foundations of Special Education (Farrell, 2009a) discusses these areas in detail.

Bibliography

- Abela, J. R. Z. and Hankin, B. L. (eds) (2008) *Handbook of Depression in Children and Adolescents*, New York, The Guilford Press.
- Achenbach, T. M. and Edelbrock, C. S. (1983) *Manual for the Child Behaviour Checklist and Revised Child Behaviour Profile*, Burlington, Department of Psychiatry, University of Vermont.
- Alberto, P. A. and Troutman, A. C. (2005) (7th edition) *Applied Behavioural Analysis for Teachers*, Columbus, OH, Merrill/Prentice Hall.
- Alexander, J. F., Pugh, C., Parsons, B. and Sexton, T. L. (eds) (2000) *Functional Family Therapy*, Golden, CO, Venture.
- Alexander, J. F. and Parsons, B. V. (1982) *Functional Family Therapy*, Monterey, California, Brooks/Cole.
- Alexander, J. F., Waldron, H. B., Newberry, A. M. and Liddle, N. (1988) 'Family approaches to treating delinquents' in Nunnally, E. W., Chilman, C. S. and Cox, F. M. (eds) *Mental Illness, Delinquency, Addictions and Neglect* (pp. 128–46), Newbury Park, California, Sage.
- Ali, D. *et al.* (1997) *Behavior in Schools: A Framework for Intervention*, Birmingham, Birmingham Education Department, United Kingdom.
- American Psychiatric Association (2000) *Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition Text Revision), Washington DC, APA.
- Anastopoulos, A. D. and Farley, S. E. (2003) 'A cognitive-behavioural training program for parents of children with attention-deficit/hyperactivity disorder' in Kazdin, A. E. and Weisz, T. R. (eds) (2003) *Evidence Based Psychotherapies for Children and Adolescents* (pp. 187–203), New York, The Guilford Press.
- Anderson, D. M. (Chief lexicographer) (2007) (31st edition) *Dorland's Illustrated Medical Dictionary*, Philadelphia, PA, Elsevier/Saunders.
- Antidote (2003) *The Emotional Literacy Handbook*, London, David Fulton Publishers.
- Antony, M. M. and Roemer, L. (2003) 'Behaviour therapy' in Gurman, A. S. and Messer, S. B. (eds) (2003) *Essential Psychotherapies: Theory and Practice*, New York, Guilford Press.

- Armstrong, T. (2006) 'Canaries in the coal mine: The symptoms of children labelled "ADHD" as biocultural feedback' in Lloyd, G., Stead, J. and Cohen, D. (eds) *Critical New Perspectives on ADHD*, New York, Routledge.
- Arthur-Kelly, M., Lyons, G., Butterfield, N. and Gordon, C. (2007) (2nd edition) *Classroom Management: Creating Positive Learning Environments*, Melbourne, Australia, Thompson Learning.
- Ayers, H. and Prytys, C. (2002) *An A to Z Practical Guide to Emotional and Behavioural Difficulties*, London, David Fulton Publishers.
- Bandura, A. (1977) *Social Learning Theory*, Englewood Cliffs, New Jersey: Prentice-Hall.
- Bandura, A. (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*, Englewood Cliffs, NJ, Prentice-Hall.
- Bandura, A. and Walters, R. (1959) *Adolescent Aggression*, New York, Ronald Press.
- Barkley, R. (1997) *ADHD and the Nature of Self Control*, New York, Guilford.
- Barkley, R. A. (2006a) (3rd edition) *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment*, New York/London, Guilford Press.
- Barkley, R. A. (2006b) *ADHD in the Classroom: Strategies for Teaching*, New York/London, Guilford Press.
- Barkley, R. A., Shelton, T. L., Crosswait, C. C., Moorehouse, M., Fletcher, K., Barrett, S., Jenkins, L. and Metevia, L. (2000) 'Multi-method psycho-educational intervention for preschool children with disruptive behaviour: Preliminary results at post treatment', *Journal of Child Psychology and Psychiatry* 41, 319–32.
- Barrett, P. M., Dadds, M. R. and Rapee, R. M. (1996) 'Family treatment for childhood anxiety: A controlled trial', *Journal of Consulting and Clinical Psychology* 64, 333–42.
- Biederman, J., Newcorn, J. and Sprich, S. (1991) 'Comorbidity of attention deficit hyperactivity disorder with conduct, depressive, anxiety and other disorders', *American Journal of Psychiatry* 148, 564–77.
- Beck, A. T., Rich, A. J., Shaw, B. F. and Emery, G. (1979) *Cognitive Theory of Depression*, New York, Wiley.
- Bernstein, G. A. and Borchardt, C. M. (1991) 'Anxiety disorders of childhood and adolescence: A critical review', *Journal of the American Academy of Child and Adolescent Psychiatry* 30, 519–32.
- Birmaher, B., Ryan, N. D., Williamson, D. E., Brent, D. A., Kaufman, J., Dahl, R. E., Perel, J. and Nelson, B. (1996) 'Childhood and adolescent depression: A review of the past ten years, Part 1', *Journal of the American Academy of Child and Adolescent Psychiatry* 35, 1427–39.
- Blagg, N. R. and Yule, W. (1984) 'The behavioural treatment of school refusal: A comparative study', *Behaviour Research and Therapy* 22, 119–27.
- Blanchard, E. B. (1970) 'Relative contributions of modelling, informational influences, and physical contact in extinction of phobic behaviour', *Journal of Abnormal Psychology* 76, 55–61.
- Bloomquist, M. and Schnell, M. (2005) *Helping Children with Aggression and Conduct Problems*, New York, Guilford Press.

- Bonati, M. (2006) 'The Italian saga of ADHD and its treatment', in Lloyd, G., Stead, J. and Cohen, D. (eds) *Critical New Perspectives on ADHD*, New York, Routledge.
- Borduin, C. M. (1999) 'Multi-systemic treatment of criminality and violence in adolescents', *Journal of the American Academy for Child and Adolescent Psychiatry* 38, 242–9.
- Borger, N. and Van der Meer, J. (2000) 'Visual behaviour of ADHD children during an attention test', *Journal of Child Psychology and Psychiatry* 41, 4, 525–32.
- Bowlby, J. (1965) (2nd edition) *Child Care and the Growth of Love*, Harmondsworth, Penguin Books.
- Bowlby, J. (1969) *Attachment and Loss Volume 1: Attachment*, London, Hogarth Press.
- Bowlby, J. (1973) *Attachment and Loss Volume 2: Separation, Anxiety and Anger*, London, Hogarth Press.
- Bowlby, J. (1980) *Attachment and Loss Volume 3: Loss, Sadness and Depression*, London, Hogarth Press.
- Boxall, M. (2002) *Nurture Groups in School: Principles and Practice*, London, Paul Chapman Publishing.
- Brent, D. A., Kolko, D., Birmaher, B., Baugher, M., Bridge, J., Roth, C. and Holder, D. (1998) 'Predictors of treatment efficacy in a clinical trial of three psychosocial treatments for adolescent depression', *Journal of the American Academy for Child and Adolescent Psychiatry*, 37, 906–14.
- Carey, W. B. (2002) 'Is ADHD a valid disorder?' in Jensen, P. S. and Cooper, J. R. (eds) *Attention Deficit Hyperactivity Disorder: State of the Science. Best Practices*, Kingston, NJ, Civic Research Institute.
- Carlson, C. L., Pelham, W. E., Milich, R. and Dixon, J. (1992) 'Single and combined effects of methylphenidate and behaviour therapy on the classroom performance of children with attention deficit hyperactivity disorder', *Journal of Abnormal Child Psychology*, 20, 213–32.
- Carr, A. (2000) *What Works with Children and Adolescents?*, London, Routledge.
- Carr, A. (2006) (2nd edition) *The Handbook of Child and Adolescent Clinical Psychology: A Contextual Approach*, London, Routledge.
- Chomsky, N. (1959) 'A review of Skinner's verbal behaviour', *Language* 35, 26–58.
- Chorpita, B. F. (2005) *Modular Cognitive-Behavioural Therapy for Childhood Anxiety Disorders*, New York, Guilford Press.
- Clarke, G. N., Rohde, P., Lewinsohn, P. M., Hops, H. and Seeley, J. R. (1999) 'Cognitive-behavioural treatment of adolescent depression: Efficacy of acute group treatment and booster sessions', *Journal of the American Academy for Child and Adolescent Psychiatry* 38, 272–9.
- Cohen, D. (2006) 'Critiques of the "ADHD" enterprise', in Lloyd, G., Stead, J. and Cohen, D. (eds) *Critical New Perspectives on ADHD*, New York, Routledge.
- Cooper, P. and O'Regan, F. J. (2001) *Educating Children with AD/HD*, London, Routledge-Falmer.
- Cousins, L. S. and Weiss, G. (1993) 'Parent training and social skills training for children with attention deficit hyperactivity disorder: How can they be combined for greater effectiveness?', *Canadian Journal of Psychiatry* 38, 449–57.

- Cutting, L. E. and Denckla, M. B. (2003) 'Attention: Relationships between attention-deficit hyperactivity disorder and learning disability' in Swanson, H. L., Harris, K. R. and Graham, S. (eds) (2003) *Handbook of Learning Disabilities*, New York, The Guilford Press.
- Dallo, R. and Draper, R. (2000) *An Introduction to Family Therapy*, Oxford, Oxford University Press.
- Daniels, A. and Williams, H. (2000) 'Reducing the need for exclusions and statements for behaviour: The framework for intervention part 1', *Educational Psychology in Practice* 15, 4 January.
- Davis, J. (2006) 'Disability, childhood studies and the construction of medical discourses: Questioning attention deficit hyperactivity disorder: a theoretical perspective', in Lloyd, G., Stead, J. and Cohen, D. (eds) *Critical New Perspectives on ADHD*, New York, Routledge.
- DeGrandpre, R. (1998) *Ritalin Nation: Rapid-fire Culture and the Transformation of Human Consciousness*, New York, W. W. Norton and Company.
- De Silva, P., Rachman, S. and Rachman, J. (1998) *Obsessive-Compulsive Disorder: The Facts*, Oxford, Oxford University Press.
- Department for Education and Skills (2001) *Special Educational Needs Code of Practice*, London, DfES.
- DeVeugh-Geiss, J., Moroz, G., Beiderman, J., Cantwell, D. P., Fontaine, R., Greist, H. J., Reichler, R., Katz, R. and Landau, P. (1992) 'Clomipramine in child and adolescent obsessive-compulsive disorder: A multicenter trial', *Journal of the American Academy of Child and Adolescent Psychiatry* 31, 45–9.
- Dobson, K. S. (ed.) (2003) (2nd edition) *Handbook of Cognitive-Behavioural Therapies*, New York, Guilford Press.
- Dobson, K. S. and Dozoiz, D. J. A. (2001) 'Historical and philosophical bases of cognitive-behavioural therapies' in Dobson, K. S. (ed.) (2nd edition) *Handbook of Cognitive-Behavioural Therapies*, New York, Guilford Press.
- Dockar-Drysdale, B. (1991) *The Provision of Primary Experience: Winnicottian Work with Children and Adolescents*, London, Free Association Press.
- Dockar-Drysdale, B. (1993) *Therapy and Consultation in Childcare*, London, Free Association Press.
- Dowling, E. and Osborne, E. (1994) (2nd edition) *The Family and the School: A Joint Systems Approach to Problems with Children*, London, Routledge.
- D'Zurilla, T. J. (1986) *Problem Solving Therapy*, New York, Springer Publishing
- Ellis, A., Gordon, J., Neenan, M. and Palmer, S. (1997) *Stress Counselling: A Rational Emotive Behaviour Approach*, London, Cassell.
- Emslie, G. H., Rush, A. J., Weinberg, W. A., Kowatch, R. A., Hughes, C. W., Carmody, T. and Rintelmann, J. (1997) 'A double-blind randomised, placebo-controlled trial of fluoxetine in children and adolescents with depression', *Archives of General Psychiatry* 54, 1031–7.
- Esbensen, F. A. and Osgood, D. W. (1999) 'Gang resistance education and training (GREAT): Results from the national evaluation', *Journal of Research in Crime and Delinquency* 36, 194–225.

- Eyberg, S. M., Boggs, S. R. and Algina, J. (1995) 'Parent-child interaction therapy: A psychosocial model for the treatment of young children with conduct problem behaviour and their families', *Psychopharmacology Bulletin* 31, 83–91.
- Farrell, M. (2001b) *Standards and Special Educational Needs*, London, Continuum.
- Farrell, M. (2003) *Understanding Special Educational Needs: A Guide for Student Teachers*, New York and London, Routledge.
- Farrell, M. (2006) *Celebrating the Special School*, London, David Fulton.
- Farrell, M. (2008) *Educating Special Children: An introduction to provision for pupils with disabilities and disorders*, New York and London, Routledge.
- Farrell, M. (2009) *Foundations of Special Education*, London and New York, Wiley.
- Farrell, M. (2009b) (4th edition) *The Special Education Handbook*, London, David Fulton.
- Feingold, B. F. (1975) 'Hyperkinesia and learning difficulties linked to artificial food colours and flavors', *American Journal of Nursing* 75, 797–803.
- Folensbee, R. W. (2007) *The Neuroscience of Psychological Therapies*, Cambridge, Cambridge University Press.
- Fonagy, P., Target, M., Cottrell, D., Phillips, J. and Kurtz, Z. (2002) *What Works for Whom? A Critical Review of Treatments for Children and Adolescents*, New York, Guilford Press.
- Fonagy, P., Target, M., Cottrell, D., Phillips, J. and Kurtz, Z. (2005) *What Works for Whom? A Critical Review of Treatments for Children and Adolescents*, New York, The Guilford Press.
- Franklin, M. E., Kozak, M. J., Cashman, L. A., Coles, M. E., Rhiengold, A. A. and Foa, E. B. (1998) 'Cognitive-behavioural treatment of paediatric obsessive-compulsive disorder: An open clinic trial', *Journal of the American Academy of Child and Adolescent Psychiatry* 37, 412–19.
- Freud, A. (1945) 'Adolescence', *The Psychoanalytic Study of the Child* 13, 255–78.
- Freud, A. ([various dates]/1998) *Selected Writings – Anna Freud*, Ekins, R. and Ruth Freeman, R. (eds), London, Penguin.
- Freud, S. ([1940]/2002) *An Outline of Psychoanalysis*, London, Penguin Books (translation Helena Ragg-Kirkby).
- Fryer, A. J. (1998) 'Current approaches to etiology and psychopathology of specific phobia', *Biological Psychiatry* 44, 1295–304.
- Funderburk, B. W., Eyberg, S. M., Newcomb, K., McNeil, C. B., Hembree-Kigin, T. and Capage, L. (1998) 'Parent-child interaction therapy with behaviour problem children: Maintenance of treatment effects in the school setting', *Child and Family Behaviour Therapy* 20, 17–38.
- Gabriels, R. and Hill, D. E. (2007) *Growing Up with Autism: Working with School Age Children and Adolescents*, New York, Guilford Press.
- Geldard, K. and Geldard, D. (2001) *Working with Children in Groups*, Basingstoke, Palgrave.
- Geller, B., Reising, D., Leonard, H. L., Riddle, M. A. and Walsh, B. T. (1999) 'Critical review of tricyclic antidepressant use in children and adolescents', *Journal of the American Academy of Child and Adolescent Psychiatry* 38, 513–16.

- Gibbs, J. C., Potter, G. B., Barriga, A. Q. and Liau, A. K. (1996) 'Developing the helping skills and prosocial motivation of aggressive adolescents in peer group programmes', *Aggression and Violent Behaviour* 1, 283–305.
- Giedd, J. N., Blumenthal, J., Molloy, E. and Castellanos, F. X. (2001) 'Brain imaging of attention deficit/hyperactivity disorder' in Wassertein, J., Wolf, L. E. and Lefever, F. F. (eds) *Adult Attention Deficit Disorder: Brain Mechanisms and Life Outcomes*, New York, New York Academy of Sciences.
- Gillberg, C. (1996) *Ett barn I varje klass. Om DAMP, MBD, ADHD*, Södertälje, Cura
- Goodyer, I. M. (ed.) (2001) (2nd edition) *The Depressed Child and Adolescent*, Cambridge, Cambridge University Press.
- Greenhill, L. (1998) 'Childhood ADHD: pharmacological treatments' in Nathan, P. and Gorman, M. (eds) *A Guide to Treatments that Work*, Oxford, Oxford University Press.
- Gurman, A. S. and Messer, S. B. (eds) (2005) *Essential Psychotherapies: Theory and Practice*, New York, Guilford Press.
- Hargie, O., Saunders, C. and Dickson, D. (1994) (3rd edition) *Social Skills in Interpersonal Communication*, London, Routledge.
- Harris, B. (1979) 'Whatever happened to little Albert?', *American Psychologist* 34, 2, 151–60.
- Hersen, M. (ed.) (2002) *Clinical Behaviour Therapy: Adults and Children*, Hoboken, NY, John Wiley and Sons.
- Hjörne, E. (2006) 'Pedagogy in the AD/HD classroom: An exploratory study of the Little Group' in Lloyd, G., Stead, J. and Cohen, D. (eds) *Critical New Perspectives on ADHD*, New York, Routledge.
- Hornby, G., Hall, C. and Hall, E. (2003) *Counselling Pupils in Schools: Skills and Strategies for Teachers*, London, Routledge Falmer.
- Jones, G. (2002) *Educational Provision for Children with Autism and Asperger's Syndrome: Meeting their Needs*, London, David Fulton Publishers.
- Kadesjö, B. (2001) (2nd edition) *Barn med koncentrationsvårigheter*, Stockholm, Liber
- Kaplan, J.S., and Carter, J. (1995) (3rd edition) *Beyond Behavior Modification: A Cognitive-Behavioral Approach to Behavior Management in the School*, Austin, TX: Pro-ed.
- Karkou, V. (1999a) 'Art therapy in education: Findings from a nationwide survey in arts therapies', *Inscape* 4, 2, 62–70.
- Karkou, V. (1999b) 'Who? Where? What? A brief description of DMT: Results from a nationwide study', *E-motion* XI 2, 5–10.
- Kauffman, J. M. and Hallahan, D. P. (2005) *Special Education: What It Is and Why We Need It*, Boston, MA, Pearson/Allyn and Bacon.
- Kazdin, A. (1995) (2nd edition) *Conduct Disorders in Childhood and Adolescence*, Thousand Oaks, CA, Sage.
- Kazdin, A.E. (2001) (5th edition) *Behavior Modification in Applied Settings*, Pacific Grove, CA: Brooks/Cole.
- Kazdin, A. E. 'Problem-solving skills training and parent management training for conduct disorder' in Kazdin, A. E. and Weisz, T. R. (eds) (2003) *Evidence*

- Based Psychotherapies for Children and Adolescents* (pp. 241–62), New York, The Guilford Press.
- Kazdin, A. E. and Wasser, G. (2000) ‘Therapeutic changes in children, parents and families resulting from treatment of children with conduct problems’, *Journal of the American Academy of Child and Adolescent Psychiatry* 39, 414–20.
- Kazdin, A. E. and Weisz, T. R. (eds) (2003) *Evidence Based Psychotherapies for Children and Adolescents*, New York, The Guilford Press.
- Kelly, B. (1999) ‘Circle time: A systems approach to emotional and behavioural difficulties’, *Educational Psychology in Practice* 15, 1, 40–4.
- Kendall, P. C. (ed.) (2006) (3rd edition) *Child and Adolescent Therapy: Cognitive-behavioural procedures*, New York, Guilford Press.
- Kendall, P. C., Aschenbrand, S. G. and Hudson, J. L. (2003) ‘Child focused treatment of anxiety’, in Kazdin, A. E. and Weisz, T. R. (eds) (2003) *Evidence Based Psychotherapies for Children and Adolescents* (pp. 81–100), New York, The Guilford Press.
- King, N. J., Tonge, B. J., Heyne, D., Pritchard, M., Rollings, S., Young, D. Myerson, N. and Ollendick, T. H. (1998) ‘Cognitive-behavioural treatment of school refusing children: A controlled evaluation’, *Journal of the American Academy of Child and Adolescent Psychiatry* 37, 395–403.
- King, N. J., Tonge, B. J., Heyne, D., Turner, S. M., Pritchard, M., Young, D. *et al.* (2001) ‘Cognitive-behavioural treatment of school refusing children: Maintenance of improvement at 3 to 5 year follow up’, *Scandinavian Journal of Behaviour Therapy* 30, 85–9.
- Kirigin, K. A. (1996) Teaching-family model of group home treatment of children with severe behaviour problems’, in Roberts, M. C. (ed.) *Model Programs in Child and Family Mental Health* (pp. 231–47), Mahwah, NJ, Erlbaum.
- Klein, M. (1932) *The Psychoanalysis of Children*, London, Hogarth Press.
- Klein, M. ([various dates]/1964), *Contributions to Psychoanalysis, 1921–1945*, New York, McGraw-Hill.
- Klein, M. ([1957]/1975) *Envy and Gratitude*, New York, Delacorte Press.
- Larson, J. and Lochman, J. (2005) *Helping School Children Cope with Anger: A Cognitive-Behavioural Intervention*, New York, Guilford Press.
- Larson, P. J. and Maag, J. W. (1998). ‘Applying functional assessment in general educational classrooms: Issues and recommendations’, *Remedial and Special Education*, 19, 6, 338–49.
- Lewinsohn, P. M. and Clarke, G. N. (1999) ‘Psychosocial treatments for adolescent depression’, *Clinical Psychology Review* 19, 329–42.
- Litow, L. and Pumroy, D. K. (1975) ‘A brief review of classroom group-orientated contingencies’, *Journal of Applied Behavioural Analysis* 3, 341–7.
- Lloyd, G., Stead, J. and Cohen, D. (eds) (2006) *Critical New Perspectives on ADHD*, New York, Routledge.
- Lochman, J. E. and Wells, K. C. (1996) ‘A social-cognitive intervention with aggressive children: Prevention effects and contextual implementation issues’, in Peters, R. E. and McMahon, R. J. (eds) *Preventing Childhood Disorders, Substance Abuse and Delinquency* (pp. 111–43), Thousand Oaks, California: Sage.

- Lochman, J. E., Barry, T. D. and Pardini, D. A. (2003) 'Anger control training for aggressive youth', in Kazdin, A. E. and Weisz, T. R. (eds) *Evidence Based Psychotherapies for Children and Adolescents* (pp. 263–81), New York, The Guilford Press.
- McSherry, J. (2001) *Challenging Behaviours in Mainstream Schools: Practical Strategies for Effective Intervention and Reintegration*, London, David Fulton Publishers.
- Mahoney, M. (1991) *Human Change Processes*, New York, Basic Books.
- Mann, E. M., Ikeda, Y., Mueller, C. W., Takahashi, A., Tai Toa, K., Humris, E., Ling Li, B. and Chin, D. (1992) 'Cross-cultural differences in rating hyperactive-disruptive behaviours in children', *American Journal of Psychiatry* 58, 336–44.
- March, J. S. (1999) 'Psychopharmacological management of paediatric obsessive-compulsive disorder (OCD)', Paper presented at the 46th annual meeting of the American Academy of Child and Adolescent Psychiatry, Chicago.
- Meltzoff, J. and Kornreich, M. (1970) *Research in Psychotherapy*, New York, Atherton
- Menzies, R. G. and Clarke, J. C. (1993) 'A comparison of *in vivo* and vicarious exposure in the treatment of childhood water phobia', *Behaviour Research and Therapy* 31, 9–15.
- Mitchell, S. A. and Black, M. J. (1995) *Freud and Beyond: A History of Modern Psychoanalytic Thought*, New York, Basic Books.
- Mufson, L., Weisman, M. M., Moreau, D. and Garfinkel, R. (1999) 'Efficacy of interpersonal psychotherapy for depressed adolescents', *Archives of General Psychiatry* 56, 573–9.
- Munden, A. and Arcelus, J. (1999) *The AD/HD Handbook*, London, Jessica Kingsley.
- Mundy, P. and Neale, A. (2001) 'Neural plasticity, joint attention and a transactional social-orienting of autism' in Glidden, L. (ed.) *International Review of Research in Mental Retardation: Autism vol.23*, (pp.139–68), San Diego, CA, Academic Press.
- Muratori, F., Picchi, L., Casella, C., Tancredi, R., Milone, A. and Patarnello, M. G. (2002) 'Efficacy of brief dynamic psychotherapy for children with emotional disorders', *Psychotherapy and Psychosomatics* 71, 2838.
- National Institute of Clinical Excellence (2000) *Guidance on the Use of Methylphenidate for ADHD*, London, NICE.
- Nash, M., Lowe, J. and Palmer, T. (2002) *Language development: Circle Time Sessions to Improve Communication Skills*, London, David Fulton Publishers.
- Nelson, W. M., Finch, A. J. and Hart, K. J. (eds) (2006) *Conduct Disorders: A Practitioners Guide to Comparative Treatment*, New York, Springer.
- Nigg, J. T. (2006) *What Causes ADHD? Understanding What Goes Wrong and Why*, New York, The Guilford Press.
- Nigg, J. and Hinshaw, S. (1998) 'Parent personality traits and psychopathology associated with anti-social behaviours in childhood ADHD', *Journal of Child Psychology and Psychiatry* 39, 2, 145–59.
- O'Leary, K. D. and Drabman, R. (1971) 'Token reinforcement programs in the classroom: A review', *Psychological Bulletin* 75, 379–98.

- Ollendick, T. H. and King, N. J. (1998) 'Empirically supported treatments for children with phobic and anxiety disorders' *Journal of Clinical Child Psychology* 27, 156–67.
- Patterson, G. R. and Chamberlain, P. (1988) 'Treatment process: A problem at three levels' in Wynne, L. C. (ed.) *The State of the Art in Family Therapy Research: Controversies and Recommendations* (pp. 189–223), New York, Family Process Press.
- Patterson, G. R. and Forgatch, M. S. (1995) 'Predicting future clinical adjustment from treatment outcome and process variables', *Psychological Assessment* 7, 275–85.
- Pavlov, I. P. ([1926]/1960) *Conditioned Reflexes: An Investigation of the Physiological Activity of the Cerebral Cortex*, New York, Dover Publications. Translation G. V. Anrep.
- Pellegrini, A. and Horvat, M. (1995) 'A developmental and contextualised critique of AD/HD', *Educational Researcher* 24(9), 10, 13–20.
- Pellegrini, A., Hubertey, P. and Jones, I. (1996) 'The effects of recess timing on children's playground and classroom behaviours', *American Educational Research Journal* 32, 4, 854–64.
- Pine, D. S. and Klein, R. G. (2008) 'Anxiety disorders' in Rutter, M., Bishop, D. V. M., Pine, D. S., Scott, S., Stevenson, J., Taylor, E. and Thapar, A. (eds) (2008) (5th edition) *Rutter's Child and Adolescent Psychiatry*, Oxford and Malden, MA, Blackwell.
- Quinn, M. M., Kavale, K. A., Mathur, S. R., Rutherford, R. B. and Forness, S. R. (1999) 'A meta-analysis of social skill interventions for students with emotional or behavioural disorders', *Journal of Emotional and Behavioural Disorders* 7, 54–64.
- Rachman, S. (2004) (2nd edition) *Anxiety*, London and New York, Taylor and Francis
- Raine, A. (2002) 'The role of prefrontal deficits, low autonomic arousal, and early health factors in the development of antisocial and aggressive behaviour', *Journal of Child Psychology and Psychiatry* 43, 417–34.
- Reid, R. and Maag, J.W. (1998). Functional assessment: A method for developing classroom-based accommodations and interventions for children with ADHD, *Reading and Writing Quarterly*, 14, 9–42.
- Reinecke, M. A. and Freeman, A. (2003) 'Cognitive therapy' in Gurman, A. S. and Messer, S. B. (eds) *Essential Psychotherapies: Theory and Practice*, New York, Guilford Press.
- Reynolds, C. R. and Fletcher-Janzen, E. (eds) (2004) (2nd edition) *Concise Encyclopaedia of Special Education: A Reference for the Education of Handicapped and Other Exceptional Children and Adults*, Hoboken, NY, John Wiley and Sons.
- Riddle, M. A., Reeve, A. E., Yaryura-Tobias, J. A., Yang, H. M., Claghorn, J. L., Gaffney, G., Greist, J. H., Holland, D., McConville, B. J., Pigott, T. and Walkup, J. T. (2001) 'Fluvoxamine for children and adolescents with obsessive-compulsive disorder: A randomised, controlled, multicenter trial', *Journal of the American Academy of Child and Adolescent Psychiatry* 40, 222–9.

- Roth, A. and Fonagy, P. (2005) (2nd edition) *What Works for Whom? A Critical Review of Psychotherapy Research*, New York, The Guilford Press.
- Rutherford, R. B. Jr and Nelson, C. M. (1988) 'Generalisation and maintenance of treatment effects' in Witt, J. C., Elliott, S. W. and Gresham, F. M. (eds) *Handbook of Behaviour Therapy in Education* (pp. 277–324), New York, Plenum.
- Rutherford, R. B. Jr and Polsgrove, L. J. (1981) 'Behavioural contracting with behaviourally disordered and delinquent children and youth: An analysis of the clinical and experimental literature' in Rutherford, R. B. Jr, Prieto, A. G. and McGlothlin, J. E. (eds) *Severe Behaviour Disorders of Children and Youth*, Volume 4 (pp. 49–69), Reston, VA, Council for Children with Behavioural Disorders.
- Rutter, M., Bishop, D. V. M., Pine, D. S., Scott, S., Stevenson, J., Taylor, E. and Thapar, A. (eds) (2008) (5th edition) *Rutter's Child and Adolescent Psychiatry*, Oxford and Malden, MA, Blackwell.
- Sage, R. and Sluckin, A. (2004) *Silent Children: Approaches to Selective Mutism*, Leicester, University of Leicester.
- Schaverien, J. (1995) 'Researching the esoteric: Art therapy research' in Gilroy, A. and Lee, C. (eds) *Art and Music Therapy Research*, London, Routledge.
- Seifert, J., Scheuerpflug, P., Zillerssen, K. E., Fallgater, A. and Warnke, A. (2003) 'Electrophysiological investigations of the effectiveness of methylphenidate in children with and without ADHD', *Journal of Neural Transmission* 110, 7, 821–8.
- Sigafoos, J., Arthur, M. and O'Reilly, M. (2003). *Challenging Behaviour and Developmental Disability*, London, Whurr.
- Simonoff, E. (2001) 'Genetic influences on conduct disorders' in Hill, J. and Maughan, B. (eds) *Conduct Disorder in Childhood and Adolescence* (pp. 202–34), Cambridge, Cambridge University Press.
- Skinner, F. B. ([1953]/1965) *Science and Human Behaviour*, New York, The Free Press.
- Skinner, B. F. (1957) *Verbal Behaviour*, New York, Appleton-Century-Crofts.
- Spivak, G. and Shure, M. B. (1978) *Problem Solving Techniques in Child Rearing*, San Francisco, Jossey-Bass.
- Spivak, G. and Shure, M. B. (1982) 'The cognition of social adjustment: Interpersonal cognitive problem solving thinking' in Lahey, B. and Kazdin, A. (eds) (Vol. 5) *Advances in Clinical Child Psychology* (pp. 323–72), New York, Plenum.
- Strauss, C. C. and Last, C. G. (1993) 'Social and simple phobias in children', *Journal of Anxiety Disorders* 7, 141–52.
- Tannock, R. (1998) 'ADHD: Advances in cognitive, neurobiological and genetic research', *Journal of Child Psychology and Psychiatry* 39, 1, 65–99.
- Taylor, E. and Sonuga-Barke, E. (2008) 'Disorders of attention and activity' in Rutter, M., Bishop, D. V. M., Pine, D. S., Scott, S., Stevenson, J., Taylor, E. and Thapar, A. (eds) (5th edition) *Rutter's Child and Adolescent Psychiatry*, Oxford and Malden, MA, Blackwell.
- Thorndyke, E. L. ([1911]/1965) *Animal Intelligence*, New York, Hafner Publishing.
- Toren, P., Wolmer, L., Rosental, B., Elder, S., Koren, S., Lask, M. *et al.* (2000) 'Case series: Brief parent-child group therapy for childhood anxiety disorders

- using a manual based cognitive-behavioural technique', *Journal of the American Academy for Child and Adolescent Psychiatry* 39, 10, 1309–12.
- Tremblay, R. (ed.) (2005) *Developmental Origins of Aggression*, New York, Guilford Press.
- Valente, L. and Fontana, D. (1997) 'Assessing client progress in drama therapy' in Jennings, S. (ed.) *Dramatherapy: Theory and Practice*, 3, London, Routledge.
- Walker, H. M. (1983) 'Application of response cost in school settings: Outcomes, issues and recommendations', *Exceptional Children Quarterly* 3, 4, 46–55.
- Wallace, B. and Crawford, S. (1994) 'Instructional paradigms and the ADHD child' in Weaver, C. (ed.) *Success at Last: Helping Students with AD(H)D Achieve Their Potential*, Portsmouth, NH, Heinemann.
- Watson, J. B. and Morgan, J. J. B. (1917) 'Emotional reactions and psychological experimentation', *American Journal of Psychology* April, 1917, V 28, pp. 163–74.
- Watson, J. B. and Rayner, R. (1920) 'Conditioned emotional reactions', *Journal of Experimental Psychology* 3, 1, 1–14.
- Webster-Stratton, C. and Reid, M. J. (2003) 'The incredible years parents, teachers and children training series' in Kazdin, A. E. and Weisz, J. R. (eds) *Evidence Based Psychotherapies for Children and Adolescents* (pp. 224–40), New York, Guilford Press.
- Weisz, J. R., Southam-Gerow, M. A., Gordis, E. B. and Connor-Smith, J. (2003) 'Primary and secondary control enhancement training for youth depression: Applying the deployment-focused model of treatment development and testing', in Kazdin, A. E. and Weisz, T. R. (eds) (2003) *Evidence Based Psychotherapies for Children and Adolescents* (pp. 165–83), New York, The Guilford Press.
- Weyandt, L. L. (2007) (2nd edition) *An ADHD Primer*, New York, Taylor and Francis.
- Whitaker, S. (1996) 'A review of DRO: The influence of the degree of intellectual disability and the frequency of the target behaviour', *Journal of Applied Research in Intellectual Disabilities*, 9, 61–79.
- Winnicott, D. W. (1958) *Through Paediatrics to Psychoanalysis*, London, Hogarth Press.
- Winnicott, D. W. (1965) *The Maturational Process and the Facilitating Environment*, London, Hogarth Press.
- Wolfenden, S. R., Williams, K., and Peat, J. K. (2003) 'Family and parenting interventions in children and adolescents with conduct disorder and delinquency aged 10–17' (Cochrane review), in *The Cochrane Library* Issue 4, Chichester, U.K., Wiley.

Index

- adolescent-focused interventions,
conduct disorder 58, 59–60
- adolescents: ADHD 90, 93; anxiety
and depressive disorders 66–7, 69,
71, 73, 74, 76–9, 82, 83, 108;
conduct disorder 28–9, 49–50,
58–61; disruptive behaviour
disorders 48, 61–4, 107; family
therapy 30–1
- agoraphobia 71
- Alexander, J. F. 30, 58
- Algina, J. 54–5
- allergies, ADHD 103–4, 111
- ‘Anger Coping Program’ 55
- anger management 42, 55–6, 57,
59–60, 61, 62
- anticonvulsants 61
- antidepressants 70
- antipsychotic drugs 61
- anti-social behaviour, ADHD 90,
93
- anxiety disorders 4, 5–6, 36, 66–85,
106, 107–8; conduct disorder 51;
depressive disorders 76; self-talk
41–2
- applied behaviour analysis 19–21
- arousal: ADHD 94; conduct disorder
51–2
- arts therapies 36–7, 43
- assessment: ADHD 95–6, 110;
conduct disorder 53–8; depressive
disorders 77, 82; disruptive
behaviour disorders 61–2; family
therapy 30; generalised anxiety
disorder 68; obsessive-compulsive
disorder 70; phobias 72; selective
mutism 75; separation anxiety
disorder 73
- association 9
- attachment theory 35, 37
- attentional processes 17
- attention deficit hyperactivity disorder
(ADHD) 4, 6, 21, 23–4, 60,
86–105, 106, 110–11; classroom
contingency management 57;
cognitive-behavioural approach
42; conduct disorder 49, 50, 51;
depressive disorders 76;
oppositional defiant disorder 48
- Attention Training System 24, 97–8
- autism 89
- automatic thoughts 40
- Bandura, A. 8, 16, 17–18, 23, 24, 107
- Barkley, R. A. 57, 94
- barriers to learning 48, 57
- Beck, A. T. 40
- behavioural approaches 8, 9–15,
19–25, 38–9, 106, *see also*
cognitive-behavioural approach
- behavioural/observational
foundations 111, 112
- behavioural therapy 27, 38, 72
- behaviour contracts 15, 20
- behaviour environment plan 33–4
- behaviour management, ADHD
23–4, 97–8
- belief systems 32
- biofeedback, ADHD 98–9, 110
- Boggs, S. R. 54–5

- Bowlby, John 35, 37
 breaks, ADHD 100–1, 110
 brief psychotherapy 28
- Carey, W. B. 90
 Carlson, C. L. 23–4, 97
 child-focused treatment, generalised
 anxiety disorder 68
 circle time 80, 109
 classical conditioning 9–10, 16, 24,
 59, 106
 classroom contingency management
 57, 62
 classroom layout, ADHD 101, 110
 Clomipramine 70
 clonidine 61
 cognitive-behavioural approach 19,
 20–1, 29, 38–42, 43, 107; ADHD
 98, 99, 103, 111; anxiety and
 depressive disorders 82, 108
 cognitive-behavioural therapy:
 conduct disorder 56–7; depressive
 disorders 77–8; generalised
 anxiety disorder 68, 107–8;
 obsessive-compulsive disorder 71,
 108; phobias 73, 108; separation
 anxiety disorder 74, 108
 cognitive-constructivist model 38, 39
 cognitive deficits/distortions 40–1
 cognitive schema 40
 cognitive therapy 29, 39, 40–1, 43,
 103
 Cohen, D. 87, 88, 89
 conditioned emotional responses
 10–11, 24, 106
 conditioned reinforcers 13–14
 conditioned response 10
 conditioned stimulus 10
 conditioning: classical 9–10, 16, 24,
 59, 106; operant 11–14, 19, 23,
 24, 38–9, 72, 106, 108
 conduct disorder 18, 28–9, 46, 47,
 48–52, 63, 64, 107; ADHD 90, 93,
 95; depressive disorders 76;
 psychotherapy 28
 contextual social cognitive model 55
 contingencies 15
 contingency management 23, 72, 108
 contracts 15, 20
- ‘Coping Power’ 55–6
 Coping in Schools programme 79
 culture: ADHD 88–9, 92; joint
 systems approach 32
 curriculum: ADHD 96, 110; anxiety
 and depressive disorders 79–80,
 109; disruptive behaviour
 disorders 61–2
 cycle of interaction 31
- Daniels, A. 33
 Davis, J. 87–8, 99
 depressive disorders 4, 5–6, 51,
 66–85, 106, 108–9
 desensitisation 22, 72
 developmental foundations 111, 112
 diet, ADHD 103–4, 111
 differential reinforcement 11, 14, 15
 disability codes 2–3
 discrimination 11–12
 disorder of attention motor control
 and perception 91
 disruptive behaviour disorders 4, 5,
 46–65, 106, 107
 Dockar-Drysdale, Barbara 37
 Drabman, R. 15
 drama therapy 36, 37, 97
 dysthymic disorder 36, 68–9, 76, 77,
 108
- elective mutism 21–2, 108
 emotional literacy, depressive
 disorders 80
 ‘Equipping Youth to Help One
 Another’ 59–60
 Esbensen, F. A. 60
 experiential learning, ADHD 96–7,
 110
 extinction 10, 14, 20
 Eyberg, S. M. 54–5
- family: joint systems approach 32;
 school liaison 33, 83; as system
 31–3, *see also* parents
 family-based behavioural treatment
 22, 75–6, 108
 family-based intervention: conduct
 disorder 58; disruptive behaviour
 disorders 63

- family management: anxiety and depressive disorders 83, 109; generalised anxiety disorder 68–9
- family therapy 29–31; conduct disorder 52; depressive disorders 78
- feedback 17, 52; ADHD 96, 97–9, 110; Attention Training System 24, 97–8
- flooding 22, 72, 108
- fluoxetine 79
- fluvoxamine, obsessive-compulsive disorder 70
- focal psychodynamic psychotherapy 36, 43, 69, 108
- Fonagy, P. 22, 60, 72, 77, 103, 108
- food allergies, ADHD 103–4, 111
- Forgatch, M. S. 54, 59
- Freeman, A. 29
- Freud, Anna 34
- Freud, Sigmund 34
- functional analysis and assessment 19, 21, 24, 95, 98
- functional family therapy 29–31, 58
- gang resistance education training 60, 61, 62
- gender differences: ADHD 93; conduct disorder 51, 52
- generalisation 15, 18, 20, 24, 25, 98
- generalised reinforcement 11, 14
- generalised anxiety disorder 66, 67–9, 74, 107–8
- genetic causes: ADHD 93; conduct disorder 51, 52; depressive disorders 77; obsessive-compulsive disorder 70
- Giedd, J. N. 94
- group work, depressive disorders 79–80
- hierarchical organisation 32
- Hjörne, 102–3
- hyperactivity 91–2, 93, 94, 99, 100, 103–4
- hyperkinesis 91
- hyperkinetic disorder 91
- imitation 9, 18, 52
- impulsiveness 91–2, 93, 94
- inattention 91–2, 93, 94, 100–1
- incompatible behaviour 14, 20
- 'Incredible Years Training Series' 53, 54
- intermittent reinforcement 14
- Interpersonal Therapy Adapted for Adolescents 77, 78–9, 82, 108
- interval reinforcement 14
- joint systems approach 32
- Klein, Melanie 34, 36
- law of effect 9
- law of exercise 9
- learning by trial and accidental success 9, 24, 106
- learning by trial and error 9
- learning theory 16–25, 30, 52, 59, 72, 106, 108
- legal/typological foundations 111
- Litow, L. 15
- Mahoney, M. 38
- major depressive disorder 76, 77
- medical foundations 111, 112
- medication: ADHD 23, 42, 60, 64, 87–9, 91, 93, 94, 97, 100, 110; anxiety and depressive disorders 82; conduct disorder 60–1; depressive disorders 79; disruptive behaviour disorders 62; obsessive-compulsive disorder 70–1
- methylphenidate (Ritalin) 23, 60, 93, 94, 97, 100
- minimal brain damage 91
- minimal brain dysfunction 91
- modelling 8, 25, 107; conduct disorder 52, 56; phobias 23, 72, 108
- moral reasoning training 59–60
- motivational processes 17
- movement therapy 36
- Mulberry Bush School 37
- multi-level/multi-agency approach 28, 63

- multi-systemic therapy 28–9, 58
 music therapy 36
- negative reinforcement 11, 12–13, 20
- negotiation strategies 54, 59
- Nelson, C. M. 15
- neuroleptics 61
- neuropsychological foundations 111, 112
- nurture groups 37–8
- object relations theory 34
- observational learning/modelling 8, 16–25, 107
- obsessive-compulsive disorder 66, 69–71, 82, 83, 107, 108
- O’Leary, K. D. 15
- operant conditioning 11–14, 19, 23, 24, 38–9, 72, 106, 108
- oppositional defiant disorder 46, 47, 48–9, 64, 107; ADHD 90, 93, 95; classroom contingency management 57
- ‘Oregon Social Learning Center Program’ 54, 57, 59
- organisation: ADHD 100–3, 110; anxiety and depressive disorders 82–3, 109; disruptive behaviour disorders 63
- Osgood, D. W. 60
- over correction 20, 57
- ‘Parent-Child Interaction Therapy’ 54–5
- parents: ADHD 87–8, 95, 103; training 29, 42, 53–5, 57, 63, 103, 111, *see also* family
- Parsons, B. V. 30, 58
- participant modelling 23, 72, 108
- participation, ADHD 99
- Patterson, G. R. 54, 59
- Pavlov, Ivan 9–10, 24, 106
- pedagogy 5, 8–26, 106–7; ADHD 96, 110; anxiety and depressive disorders 80–1, 109; disruptive behaviour disorders 62; foundations 111, 112
- peer counselling 80, 109
- phobias 11, 21, 22–3, 66, 71–3, 81, 82–3, 107, 108
- play therapy 36–7, 43
- Polsgrove, L. J. 15
- positive reinforcement 11, 12–13, 56, 59, 98
- prevalence: ADHD 93; conduct disorder 51; depressive disorders 77; generalised anxiety disorder 67; obsessive-compulsive disorder 69; opposition defiant disorder 48; phobias 72; selective mutism 75; separation anxiety disorder 73
- primary reinforcers 13–14
- ‘Primary and secondary control enhancement training for youth depression’ programme 78
- problem-solving 62; conduct disorder 54, 56–7, 59–60; dialogues and training 41, 43
- production processes 17
- psychodynamic approach 29, 34–8, 43, 107
- psychodynamic psychotherapy 27, 36, 43, 69, 108
- psycholinguistic foundations 111, 112
- psychological constructivism 38
- psychostimulants *see* Ritalin
- psychotherapeutic foundations 111, 112
- psychotherapy 5, 19, 27–45; anxiety and depressive disorders 81, 82; disruptive behaviour disorders 62, *see also* therapy
- Pumroy, D. K. 15
- punishment 11, 12–13, 54, 59
- rational-emotive behavioural therapy 39–40, 43
- ratio reinforcement 14
- Rayner, R. 10–11
- reattribution techniques 30
- reciprocal determinism 16
- reflex response 10
- Reid, M. J. 53
- Reinecke, M. A. 29
- reinforcement 11–14, 19–20; differential 11, 14, 15; generalised 11, 14; intermittent 14; interval

- 14; negative 11, 12–13, 20;
positive 11, 12–13, 56, 59, 98;
ratio 14; schedules 11, 12, 14, 20,
24, 98, 110
- resources: ADHD 100, 110; anxiety
and depressive disorders 81, 109;
disruptive behaviour disorders 62
- response cost 15, 20, 24, 54, 57, 59,
97
- responsibility, ADHD 86–7
- retention processes 17
- Ritalin 23, 60, 93, 94, 97, 100
- role-play 21, 25, 56, 97
- routines 37, 38, 82, 101–2, 109, 110
- rules 32
- Rutherford, R. B. Jr 15
- schedules of reinforcement 11, 12, 14,
20, 24, 98, 110
- school: -based interventions, conduct
disorder 58, 60; joint systems
approach 32; as system 31–3
- school refusal 22, 23, 71, 72–3, 82–3,
108
- selective mutism 66, 74–6, 107
- self-efficacy 16
- self-talk 41–2
- sensory addiction 89
- separation anxiety disorder 66, 73–4,
82–3, 107, 108
- sequences, ADHD 102
- serotonin reuptake inhibitors 70–1,
77, 79, 82, 108
- shaping 11, 12, 20
- Shure, M. B. 56
- skills: ADHD 96; modelling 18
- Skinner, B. F. 11–14, 19, 24, 39, 106
- social cognitive theory 16–25, 30, 107
- social foundations 111–12
- socialisation, ADHD 87–8
- social learning theory 16–25, 30, 106;
conduct disorder 52, 59; phobias
72, 108
- social phobia 22, 66, 71–3, 107
- social skills: conduct disorder 52;
disruptive behaviour disorders
61–2; training 52, 55–6, 57,
59–60, 62, 96, 99, 110
- social view of disability 111–12
- Sonuga-Barke, E. 89
- specific phobia 22, 66, 71–3, 107
- Spivak, G. 56
- stimulus substitution 10
- structural family systems theory,
conduct disorder 52
- substance abuse 49, 93, 94
- systems approach 29–34, 42–3, 52,
107
- Taylor, E. 89
- teacher support 47, 63, 107
- Teaching-Family Model 58, 59, 63
- technological foundations 111,
112
- terminological foundations 111
- therapy: ADHD 100, 110; anxiety
and depressive disorders 82, 83,
109; disruptive behaviour
disorders 62, *see also* psychotherapy
- Thorndyke, E. L. 9, 24, 106
- time out 15, 20, 54, 57, 59
- token economy system 15, 19, 20,
57
- transitional objects 35
- tricyclic antidepressants 70
- unconditioned response 10
- unconditioned stimulus 10
- unconscious 36, 37
- Walker, H. M. 15
- Watson, J. B. 10–11, 24, 106
- Webster-Stratton, C. 53
- Whitaker, S. 15
- Williams, H. 33
- Winnicott, D. W. 34, 36, 37