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INTRODUCTION

This book aims to provide clinicians with a comprehensive psychological guide to practice when working with adolescents and adults with ADHD by providing cognitive behavioural therapy (CBT) to treat core symptoms of the condition and its associated problems. As ADHD is a heterogeneous disorder, each individual is likely to present with a different constellation of symptoms with a range of psychological strengths and weaknesses. For this reason, this book consists of stand-alone modules that can be delivered in individual or group format and which together form the Young-Bramham Programme. The Young-Bramham Programme provides an innovative and intensive practical approach to the presentation of ADHD using cognitive behavioural and motivational interviewing techniques, which are described in detail using case examples. Each module is presented in a separate chapter of this book and can be used independently or in conjunction with other modules.

Practitioners often report feeling underequipped to treat this client group and there remains a limited literature on psychological treatment for adolescents and adults. Up to two-thirds of ADHD children continue to suffer with symptoms into adult life, many of whom experience residual problems which warrant treatment (Young and Gudjonsson, 2008). In addition, there are many young people who do not receive a diagnosis until they are adults in spite of having presented on numerous occasions to health services (Huntley and Young, submitted; Young, Toone and Tyson, 2003). ADHD has often been missed in the past, and misdiagnosis abounds. Aside from these clinical groups, there are additionally many individuals who have symptoms that fall below the threshold for formal diagnosis, but who nevertheless may benefit from psychological treatment to address their problems and functional impairments. Thus, the Young-Bramham Programme was developed as an intervention suitable for individuals with a formal ADHD diagnosis, individuals who are in partial remission of their symptoms, and individuals who present with an undiagnosed constellation of ADHD symptoms and related problems.

Cognitive-Behavioural Therapy for ADHD in Adolescents and Adults: A Psychological Guide to Practice, Second Edition. Susan Young and Jessica Bramham.

A second reason for writing the book was that we have talked to our clients and listened to their life histories. They have such stories to tell and it is clear that for many the pathway is far from easy, yet over and over again we have recognized characteristics of determination, resilience, ingenuity and creativity. We interviewed some of our patients and their partners with the aim of analyzing their experience of receiving a diagnosis and treatment for ADHD in adulthood and, for their partners, their experience of supporting them through this process. After feelings of relief and a sense of hope and expectation for the future, they were disappointed with treatment as this was not a panacea. They were not 'cured' and core functional problems persisted associated with organization and time-management skills, procrastination and low self-esteem (Young, Bramham and Gray, 2009; Young *et al*., 2008). Thus our long experience in delivering psychological interventions to adolescents and adults with ADHD, together with our extensive research on the topic, led us to develop the Young-Bramham Programme to address the persisting problems that people experience regardless of whether they receive medication or not. We are not saying that this programme will fully bridge the gap and provide a 'cure' for adults and young people with ADHD, we are however confident that the strategies and techniques provided in the Young-Bramham Programme will provide additional and valued support.

THE COMPANION WEBSITE

The Young-Bramham Programme book is supplemented by a Companion Website, which provides practical and pragmatic exercises that allow the client to identify personal specific problems and methods to address them. Strategies which involve writing ideas down or making lists of potential consequences target difficulties in organizational skills and memory problems which are inherent in ADHD. The therapist therefore needs to maximize the opportunity to create lists and structure plans during sessions. Examples, charts, diaries, figures, diagrams and illustrations are presented in both the book and on the Companion Website (the latter in a format suitable for use in sessions) to clarify information, and/or to improve accessibility and understanding of the concepts and issues presented. The Companion Website provides psychoeducational handouts and blank copies of relevant materials introduced in the programme. It can be accessed with the password provided. The materials can be downloaded, copied and used in treatment sessions to determine, evaluate and treat specific symptoms, problems and strategies. The materials will help the therapist and the client to collaboratively tailor the Young-Bramham Programme interventions according to the clients' specific needs.

ADHD IN ADOLESCENCE AND ADULTHOOD

ADHD is an established neurodevelopmental condition characterized by inattention, hyperactivity and impulsivity or a combination of these problems that commences in childhood and often persists into adolescence and occupational lives. There is a clear

treatment pathway. It is recognized that life span conditions such as ADHD should have a planned transfer of care from child, through adolescent, to adult services as young people move from one service to another at specified age milestones (Nutt *et al*., 2007).

International Guidelines on ADHD

There are published international guidelines providing advice on the assessment, treatment and management of people with ADHD (NICE, 2009; Seixas, Weiss and Muller, 2011). In the United Kingdom, the National Institute of Health and Clinical Excellence (NICE) published guidelines on ADHD in 2009 and for the first time provided guidelines for ADHD across the lifespan with the requirement for adult mental health services to recognize the disorder and provide diagnostic and treatment services. The Guidelines also drew attention to the importance of psychological interventions as a first-line treatment for children, for those with mild symptoms, and as an important complementary treatment for adults with ADHD. A key priority of the Guidelines was that drug treatment for children and young people with ADHD should always form part of a comprehensive treatment plan that includes psychological, behavioural and educational advice and interventions. NICE recommended that for older adolescents direct individual psychological interventions, using cognitive behavioural and social skills paradigms, may be more effective and acceptable to the young person. They recommended that active learning strategies should be used for a range of treatment targets, including social skills with peers, problem-solving, self-control, listening skills and dealing with and expressing feelings. These recommendations endorse the cognitive behavioural paradigm employed within the Young-Bramham programme that is applied to adolescents and adults.

ADHD Symptoms

The symptoms of ADHD are inattention, hyperactivity and impulsivity however ADHD is a heterogeneous disorder and there are broad individual differences as to how these symptoms present. Additionally, with maturity there is often a shift with hyperactivity and impulsivity modifying more than attentional symptoms (Marsh and Williams, 2004). Adolescents are more likely to fidget than run around aimlessly and problems with organization and time-management become more apparent. The progression of ADHD is also heterogeneous with some individuals experiencing full remission by adulthood, some partial remission and others none at all (Faraone, Biederman and Mick, 2006; Young and Gudjonsson, 2008). While some symptoms may appear to spontaneously remit with age, relative differences that are associated with significant functional impairments may remain; indeed around two-thirds of ADHD children will experience some persisting symptoms as young adults that will be associated with significant impairment (Faraone, Biederman and Mick, 2006).

Comorbidity

For young people with ADHD comorbidity is the rule rather than the exception, as up to two-thirds of ADHD children have one or more comorbid conditions, including oppositional defiant and/or conduct disorder, anxiety, depression, substance misuse, tic disorders and autistic spectrum disorders (Biederman, Newcorn and Sprich, 1991; Elia, Ambrosini and Berrettini, 2008; Goldman *et al*., 1998; Pliszka, 1998). Multiple presentations to health and social services have been reported by individuals who were not diagnosed until adulthood (Huntley and Young, submitted; Young, Toone and Tyson, 2003) suggesting ADHD symptoms are being missed or misdiagnosed in children. Yet for those who are identified in childhood, treatment with stimulant medication may not be fully protective as follow-up data from 208 ADHD children treated with stimulants found that 23 per cent had a psychiatric admission in adulthood (mean age of 31). Conduct problems in childhood were predictive (hazard ratio HR = 2.3) and girls had a higher risk compared with boys (HR = 2.4) (Dalsgaard *et al*., 2002).

While many comorbid conditions can be effectively treated by psychological interventions, we have found that therapists often feel apprehensive about intervening in the same way with clients with ADHD. This may be because they lack confidence in providing treatment for individuals who may present with high rates of comorbid psychiatric problems and additional overlapping, complicating psychosocial factors. We therefore decided to write this book to share our knowledge and provide guidance for practitioners who are working with adolescents and adults with ADHD.

Aetiology

The reason people develop ADHD is not clear and most likely involves a range of genetic, environmental and psychosocial factors (NICE, 2009). ADHD often runs in families and studies have shown that it is highly heritable (Steinhausen, 2009). Genes play an important role in brain development and a number of different genes are thought to be involved and that are linked to the dopamine and serotonin systems in the brain (Stergiakouli and Thapar, 2010). Environmental factors may also affect brain development such as smoking, drinking, and substance use during pregnancy, preterm birth, low birth weight, birth trauma and maternal depression. These factors can interact with genetic/neurological factors to increase the risk of developing ADHD. The causal link between psychosocial factors and ADHD is unclear but it seems that disruption to early attachment, social adversity and deprivation may be associated with the development of ADHD (Rutter, 2005).

Sex Differences and ADHD

In childhood more boys than girls are diagnosed with ADHD with a ratio of around four to one reported in research; by adulthood however this difference becomes much

less skewed (Kessler *et al*., 2006). This may be due to a referral bias in childhood with more boys being referred for clinical assessment due to their greater externalizing problems. Boys are more likely to present with disruptive behaviour and conduct problems leading them to attract the notice of health and educational professionals (Biederman *et al*., 1999; Gaub and Carlson, 1997). In contrast, girls are more likely to present with attentional problems, internalizing problems and disruption to peer relationships (Rucklidge and Tannock, 2001; Taylor *et al*., 19961; Young *et al*., 2005a, 2005b).

By young adulthood females are more likely to engage with health services for mood and anxiety disorders and/or due to pregnancy. This more frequent engagement may also be a contributory factor to the observed sex ratio adjustment in males and females being diagnosed with ADHD. Nevertheless the early sex differences in presentation of externalizing and internalizing symptoms appear to persist as higher rates of ADHD males are reported to be engaging in antisocial or criminal behaviour (Young *et al*., 2011) compared with ADHD females who have higher rates of psychiatric admissions (Dalsgaard *et al*., 2002).

These findings endorse the provision of sex specific treatments as opposed to structured 'one size fits all' treatment paradigm. The Young-Bramham modules are highly suited to this approach as therapists may select interventions appropriate to the individual presentation of their female and male patients. It is particularly striking that for people with ADHD, strengths and weaknesses in coping skills may be contrary to those typically reported (i.e. females usually being more prone to using emotional coping strategies and males tending to be more adept with problem-focused strategies). Indeed female adolescents adopt a variety of ineffectual coping strategies (Young *et al*., 2005a). Thus it is important that the therapy addresses individual coping styles and facilitates clients to select, develop and apply functional strategies to overcome their problems.

ADHD and Intellectual Functioning

ADHD is experienced by people throughout the intellectual spectrum. This means that people with high intellectual functioning also develop ADHD. However it is often mistakenly believed that high functioning individuals cannot possibly have ADHD leading them to experience a similar struggle as their lower IQ peers in attempting to get recognition and treatment for their symptoms. Their personal histories, academic and occupational attainment may be very different and without impairment in childhood but, without a doubt, what they both share in common is that they are underperforming in their personal potential and this causes confusion and distress.

In our experience the high functioning person with ADHD is more likely to present to services for diagnosis and treatment later on in life, often in adulthood. This is because they have usually learned and applied constructive compensatory strategies, such as those outlined in the Young-Bramham Programme, to support them in their

endeavours. Children with high IQs are also more likely to attend selective educational establishments that are attended by other bright children. Here, they are likely to have benefited from smaller class sizes with greater structure and less opportunity for distraction; they may have had greater opportunity for individual tuition through higher teacher to pupil ratios and/or additional input by teaching assistants. This means that they may fare comparatively well academically (but usually with some inconsistency) and problems do not become evident until much later in their occupation when they are expected to take responsibility for organizing their own work and/or leading others. For individuals who remain symptomatic, this can be the point when things breakdown. Others continue to adapt and find ways to overcome challenges by applying functional strategies. For them, a breakdown in these strategies may be precipitated by external factors in their occupation (high pressure of work and long hours), and/or because their personal resources have become diminished due to the development of physical or mental health problems and/or triggered by serious life events (such as bereavement, redundancy and divorce). Then, like a row of cards, everything collapses; the person becomes unable to apply compensatory strategies and may start to engage in dysfunctional strategies (such as drinking excessive alcohol or taking drugs). It is not long before the companion of 'impairment' becomes unavoidable.

Turning to the other end of the intellectual spectrum, confusion often arises from international differences in terminology regarding the comorbidity of learning disabilities and ADHD. In Europe, the term learning *disability* is used synonymously with the North American term 'mental retardation', whereas in North America, the term learning *disability* is more consistent with the European understanding of specific learning *difficulty*. Specific learning difficulties are characterized by a skill, such as reading, spelling, writing, arithmetic being differentially affected in the context of otherwise adequate mental functioning, that is, the individual's overall functioning is not globally low.

Some clinicians suggest that ADHD and learning disabilities are indistinguishable (e.g. Prior and Sanson, 1986) and that the core features of ADHD are expressed as a learning disabilities characteristic. However, it is now established that people with learning disability can present with ADHD if their attentional ability, hyperactivity levels and impulsivity, are below those expected given their developmental level. Furthermore, it is now recognized among many clinicians that individuals with pervasive developmental disorders are also more likely to present with ADHD symptoms warranting a comorbid diagnosis but the two diagnoses are currently mutually exclusive in DSM-IV. It has therefore been proposed that these criteria are changed in future revisions in order to accommodate the possibility of comorbid pervasive developmental disorder and ADHD (Goldstein and Schwebach, 2004).

Psychostimulant treatment of adults with learning disabilities and ADHD seems to be effective and well-tolerated (Jou, Handen and Hardan, 2004) but larger studies are required in order to fully determine their efficacy. Guidance regarding psychological intervention with clients with comorbid ADHD and learning disabilities is very

limited in the current literature. While the Young-Bramham Programme is primarily devised for use with nonlearning disabled individuals, this does not preclude use with learning disabilities clients with ADHD but several adaptations would be required.

First, attentional and response inhibition difficulties may be more pronounced for people with learning disabilities (Fox and Wade, 1998; Rose *et al*., 2009) which will further limit their ability to sustain attention in sessions. Thus if possible, the sessions need to be on a 'little and often' basis, that is, frequent, brief time periods, such as half an hour twice per week. Second, the primary therapeutic approach should be behavioural, as many individuals with learning disabilities have difficulty in accessing and applying cognitive strategies. Behavioural experiments in sessions, practical examples and simple explanations are particularly important for successful intervention with this client group. The therapist may also wish to recruit the assistance of a family member or carer who can reinforce outside the session what has been learned, as well as support homework tasks.

Specific learning problems such as dyslexia and dyscalculia have also been reported as more prevalent in individuals with ADHD (e.g. Rabiner and Cole, 2000). As a result, some individuals may be assessed for their specific learning difficulties while their underlying ADHD symptoms remain unrecognized for some time. While there is comorbidity between ADHD and specific learning difficulty, some individuals find their learning problems appear to be due to the latter but clinical assessment and formal testing indicates that an attention deficit is the primary problem.

There are three possible explanations for the association between ADHD and specific learning difficulty: (1) attention impairments impede learning; (2) working memory difficulties can affect the ability to unravel complex grammar; and/or (3) both conditions share similar neurobiological underpinnings, particularly those relating to executive dysfunction (e.g. Denkla, 1996). Indeed, frontal lobe systems involving cognitive control are likely to be affected and can result in attentional and information processing difficulties common to both disorders (Duncan *et al*., 1994).

Individuals with comorbid ADHD and dyslexia may be underrepresented in clinical services because they have difficulty in completing screening questionnaires and this deters them from following through referrals. Such individuals may be helped by having written materials relating to the diagnostic and/or treatment process presented in an appropriate form for their needs, for example, enlarged text using black and white simple characters. Some treatment exercises may be adapted from written form to verbal record using a recording device. Session may be recorded in a similar fashion.

THE TRANSITION FROM ADOLESCENCE TO ADULTHOOD

By the adoption of a lifespan perspective, international guidelines such as those published by NICE (2009) have led practitioners to focus on the needs of young people with persisting or remitting ADHD symptoms in adolescence and how best to

support them. These young people are in transition between child services and adult mental health services. However, it should be borne in mind that transition is not simply an administrative healthcare exercise as these young people are also in a personal transition when they mature physically and emotionally (Young, Murphy and Coghill, 2011). During this period young people become increasingly autonomous as they move from a child to adult role and make important and defining decisions about their future, establish key life goals and beliefs and take responsibility for their behaviour. This is paralleled by role experimentation to form their self-concept and develop a personal and social identity. Typical adolescent development is associated with increased risk taking behaviour and mortality, including substance use, accidents and self-harm (Hafner and An Der, 1997). Late adolescence is a risk period for increased mental health problems and greater complexity. It is a time when serious mental disorders such as psychosis and bipolar disorder become more common (Goodwin, 2009; Park *et al*., 2006). It is also a time of considerable environmental and psychosocial change; moving from school to college/employment, into new relationships and sometimes parenthood and leaving home. It is against this backdrop that young people with persistent ADHD symptoms must make the transition to new clinical services. They are disadvantaged in the process by their underlying mental health condition(s) and from their incomplete development (While *et al*., 2004). Typically young people with ADHD experience negative feedback from adults from a very young age and they often lack self-efficacy; thus they feel ill-equipped to deal with the challenges and problems they are facing, and attempt to overcome them with an inadequate repertoire of adaptive skills and coping strategies (Young, 2005; Young *et al*., 2005a). Thus service transfer occurs at a time of increased vulnerability, and when young people with ADHD may require guidance and support from trusted carers, including healthcare professionals.

The quandary is that something is going very wrong at this stage and concerns are growing over the high risk of drop out of ADHD services during adolescence. Late adolescence has been identified as a period of high attrition from ADHD health services with discontinuation of pharmacotherapy by the age of 21 (McCarthy *et al*., 2009). This cannot reflect rates of spontaneous symptom remission as around two-thirds of ADHD children will continue to suffer impairment of symptoms at age 25 (Faraone, Biederman and Mick, 2006). It is essential that health services maintain engagement with young people; one way may be to target adolescent youths for direct psychological interventions that aim to prevent disengagement, and facilitate transition by the provision of a holistic framework that focuses on the developmental needs of the individual. Yet such interventions are infrequently implemented in spite of these young people being at a developmental stage when they are most likely to be embraced (e.g. older, taking personal responsibility) (Young, Murphy and Coghill, 2011).

The reasons behind a decline in service utilization may be manifold. It may reflect a desire for autonomy; leaving school and perceiving less of a need for medication to control symptoms; a lower perception of need by parents and teachers as the young person matures; and change in environment to one with different cognitive demands (e.g. leaving school and starting unskilled occupations). Young people may reject adult

services due to a reluctance to 'start again' with a new team. As young people take on greater responsibility and become less dependent on parental support, they may forget to attend their appointments or make the decision to discontinue with medication. They may also wish to avoid the stigma of referral to adult mental health services. The decline may also reflect the relatively poor service provision for older adolescents and young adults with ADHD, the perception that ADHD needs to be managed by clinicians with specific expertise, or a lack of local shared care arrangements between services. Limited availability of psychoeducational materials for adolescents with ADHD and their families may also contribute to a lack of awareness of the possible change in impact of symptoms with age. A lack of familiarity among child health professionals of the change in presentation of ADHD symptoms with increasing age may lead to underrecognition of symptoms, premature termination of cases and a lack of recognition of the need to assess, triage and transition appropriately (Kooij *et al*., 2010; McCarthy *et al*., 2009). Similarly, it may also result in underrecognition of symptoms in adults presenting to community mental health teams (Asherson, 2005).

A COGNITIVE-BEHAVIOURAL MODEL OF ADHD

Based on our research and experience of working therapeutically with people with ADHD, we have devised a cognitive-behavioural model to formulate their presentation (see Figure 1.1). This figure is included on the Companion Website. It may be helpful to work through the figure and 'personalize' the formulation with the client.

Due to their longstanding neuropsychological impairments such as poor concentration, forgetfulness, problem-solving difficulties and a need for immediate gratification, people growing up with ADHD having experienced numerous negative life events. Such experiences include academic underachievement, occupational difficulties, problems in making and maintaining friendships and intimate relationships as well as experiences associated with novelty seeking and risk-taking behaviours.

When faced with certain situations or tasks, such as social encounters, dealing with conflict, or attending a job interview, people with ADHD may find that their neuropsychological impairments hamper their performance. Due to a history of failure, they can be prone to negatively appraise a situation with a pessimistic bias. Failure is likely to impact on their self-esteem; they may begin to doubt their own abilities, and in a self-fulfilling prophecy, expect failure in the future. Following negative appraisal, an individual may engage in negative behaviours such as verbal or physical aggression or they may withdraw or engage in maladaptive coping, such as alcohol or substance misuse. They are likely to have negative thoughts and beliefs about their abilities and focus on weaknesses. The combination of negative behaviour and negative thoughts or beliefs is likely to induce or worsen a negative mood stage such as anxiety, frustration or anger. Being in a negative mood state means that an individual is more likely to appraise a subsequent situation in a negative way, and so the cycle continues.

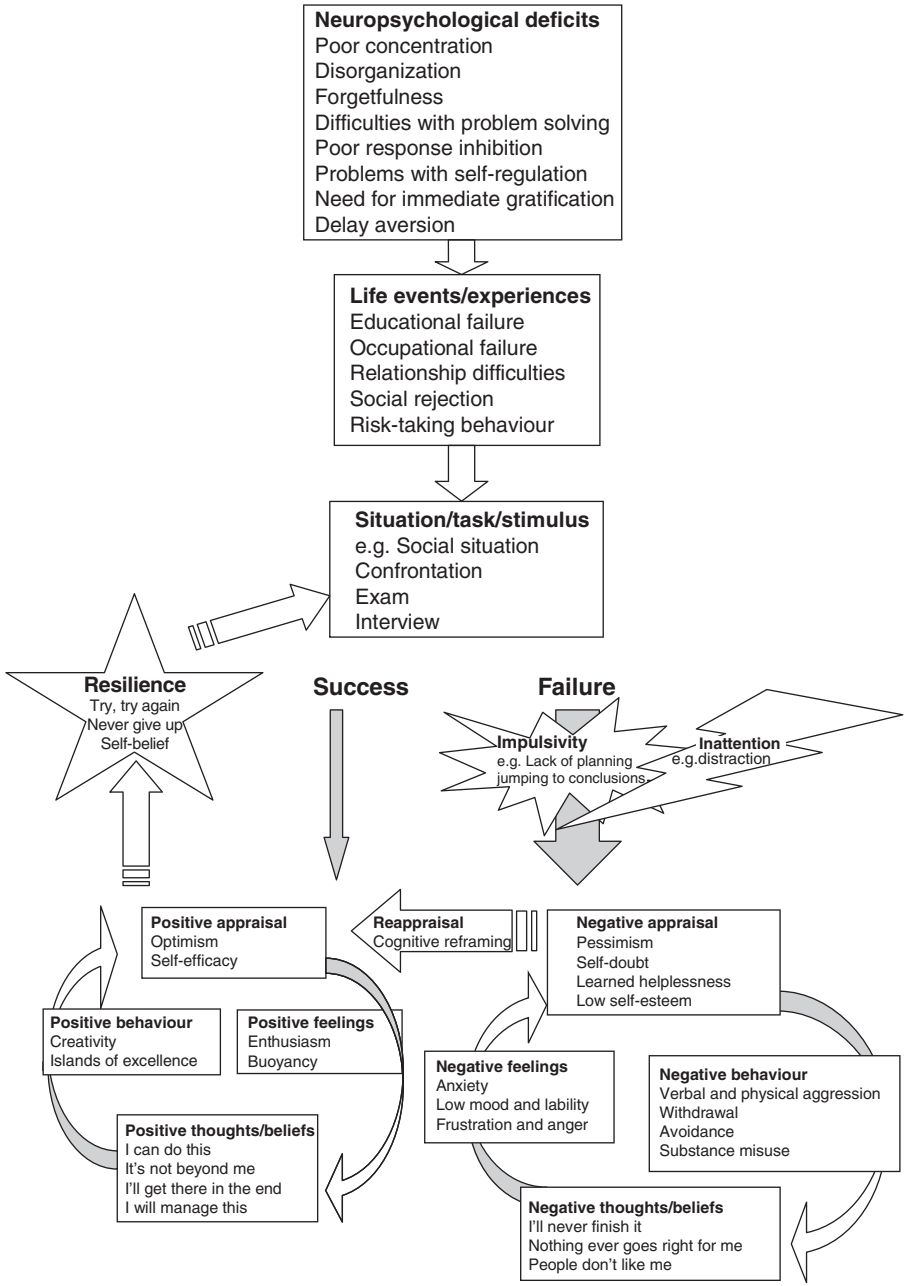

Figure 1.1 A cognitive behavioural model of ADHD in adults

However, there is both anecdotal and research evidence to suggest that adults with ADHD have an aptitude for the reappraisal or cognitive reframing of stressful situations (Young, 2005). It is possible that the negative cycle itself becomes a motivational force that compels change in situation. A 'Drive Theory' was initially proposed by Hull in 1943. According to this theory, humans are driven to reduce arousal or tension in order to maintain a sense of comfort and equilibrium (Hull, 1943). While people with ADHD may engage in a spontaneous process of reappraisal, this is likely to be negatively influenced by their cognitive impairments, resulting in the process being dysfunctional or unsuccessful. Nevertheless, a cycle is re-entered by the ADHD individual positively reframing the negative outcome, causing them to try again in the hope of achieving success. This explains the resilience commonly found in people with ADHD and suggests that this is underpinned by self-efficacy. Therefore the way they interact is associated with their ability to continually compensate and adapt. This adaptive aspect of the syndrome may be expressed creatively in innovative and entrepreneurial endeavours and personality characteristics (Young, 2005).

EVIDENCE FOR PSYCHOLOGICAL INTERVENTIONS

A review of nonpharmacological ADHD treatments across the life-span identified a gap in treatments for adolescents and adults with ADHD. By comparison there was a great deal of guidance, in the form of evidence based practice, for the delivery of psychological interventions for preschoolers and children (Young and Amarasinghe, 2010). This most likely reflects that the indirect psychological interventions typically delivered to children (via parents and teachers) are unsuitable for adolescents and young adults. The review identified two important factors with respect to the provision of psychological interventions as children mature; (1) the agent of implementation must shift from an indirect model in childhood to a direct intervention involving face-to-face contact with the developing adolescent and adult, and (2) the mode of intervention must shift to reflect the developmental needs and circumstance of the young person and adult (Young and Amarasinghe, 2010). Thus the Young-Bramham Programme addresses both of these factors by prescribing direct treatment for adolescents as well as adults and by taking a holistic approach to treatment that incorporates treatment for core symptoms, comorbid and/or developmentally defined associated problems.

Young and Amarasinghe (2010) noted that compared with investigating the effectiveness of psychopharmacological treatments, studies evaluating the effectiveness of psychological interventions in adolescents and adults are meagre. There are more studies using adult than adolescent samples and their findings are that psychological treatment in medicated patients (whether delivered in individual or group format) is effective in treating ADHD symptoms and has an additive effect over and above medication alone (Emilsson *et al*., 2011; Hirvikoski *et al*., 2011; Safren *et al*., 2005b, 2010; Solanto *et al*., 2010, Stevenson *et al*., 2002; Virta *et al*., 2010). The findings for treating comorbid problems however were mixed and most likely reflect that these

CBT interventions primarily targeted core symptoms of attention, impulsivity, planning and organization deficits. The exception being the manualized R&R2 ADHD (Young and Ross, 2007) approach which parallels the Young-Bramham Programme (and shares a co-author) by the provision of a multifaceted treatment programme to address ADHD symptoms and comorbid problems and includes modules on neurocognition, problem-solving, emotional control, prosocial skills and critical reasoning. In their randomized controlled trial, Emilsson *et al*. (2011) found that at 3-month follow-up R&R2 ADHD was highly effective in treating ADHD symptoms, anxiety, depression, antisocial behaviour and social functioning.

Comorbidity in ADHD is so common that interventions that take a holistic and modular approach are more likely to make global improvements in self-efficacy, self-esteem and quality of life. This was investigated in a controlled evaluation of the Young-Bramham Programme when this was delivered as an intensive 3-day intervention (1 day per month for 3 months) to medicated patients drawing on modules of attention, impulsivity, anxiety, anger, interpersonal relationships, time-management, problem-solving and preparing for the future. Clients reported a significant improvement in self-efficacy and self-esteem, together with their knowledge and understanding of the condition arising from the psychoeducational component of the programme (Bramham *et al*., 2009).

INTRODUCTION TO THE YOUNG-BRAMHAM PROGRAMME

Part 1: Background and Treatment

Box 1.1 outlines how the Young-Bramham Programme is divided into four parts. It commences with a background and introductory section (Part I), followed by core symptom treatment modules (Part II), comorbid and associated problem treatment modules (Part III), and the final module preparing for the future (Part IV). The core symptom treatment modules include topics on attention, memory, organization and time-management, and impulsivity. The comorbid and associated problem modules include topics on problem-solving, interpersonal relationships, anxiety, frustration and anger, low mood and depression, sleep and substance misuse. Issues around individuals' expectations and plans for the future are presented in the concluding chapter.

The primary objective of the Young-Bramham Programme is to impart the psychological treatment that can be combined with or used in preference to pharmacological therapy. The Programme has two primary aims.

1. *Change from the outside in* – to provide clinicians with ways of encouraging young people with ADHD to change their environment and optimize functioning.
2. *Change from the inside out* – to provide clinicians with ways of encouraging the individual to develop psychological strategies for adaptive functioning.

Box 1.1 The Young-Bramham programme structure

Part I: Background and Treatment

Chapter 1 Introduction to ADHD in adolescence and adulthood ADHD, and the Young-Bramham Programme as a cognitive behavioural intervention
Chapter 2 Delivering the Young-Bramham Programme

Part II: Core Symptom Modules

Chapter 3 Attention Module
Chapter 4 Memory Module
Chapter 5 Organization and Time-Management Module
Chapter 6 Impulsivity Module

Part III: Comorbid and Associated Problem Modules

Chapter 7 Problem-Solving Module
Chapter 8 Interpersonal Relationships Module
Chapter 9 Anxiety Module
Chapter 10 Frustration and Anger Module
Chapter 11 Low-Mood and Depression Module
Chapter 12 Sleep Module
Chapter 13 Substance Misuse Module

Part IV: The Future Module

Chapter 14 Preparing for the Future Module

The clinician needs to instil hope and confidence in the client in order that he/she can make progress with appropriate treatment, combined with hard work and support. This perspective needs to be offered in light of the information that there is no 'magic cure' for ADHD. However it is possible to change how the person copes with the disorder and maximize individual strengths.

Chapter 2 sets out the aims and objectives of the Young-Bramham Programme and guidance on its delivery. We describe the intervention style of the programme and describe the strategies employed. This includes: psychoeducation to inform the client about the history, treatment and prognosis of the disorder; motivational interviewing to overcome ambivalence towards treatment; and therapeutic techniques (cognitive behavioural therapy, cognitive remediation, restructuring and reframing, rationalization) to address core symptoms, comorbid and associated problems. It is very important not to skip the psychoeducational component. Throughout their lives, clients may have been told that they are stupid, lazy and unmotivated and it can therefore be extremely therapeutic and can provide a sense of relief for the individual

to understand that ADHD has a neurological basis and their problems are not due to a character defect. The chapter concludes with a description of the delivery of the Young-Bramham Programme either in individual or group format.

Part II: Core Symptom Modules

Part II consists of four modules on the topics of attention, memory, organization and time management and impulsivity. Each chapter follows a standard format providing a general introduction to the topic and a description of the functional deficits or problems faced by the developing adolescent and young adult. There follows methods to guide the therapist to assess and treat the problem with the client (and using materials that can be downloaded from the companion website), including specific cognitive behavioural strategies and techniques to address the problems identified. Each chapter concludes with an example template for the module to be delivered in group format.

The *Attention Module* (Chapter 3) addresses what is probably the most disabling symptom as individuals struggle to engage in activities that are long, boring, repetitious or tedious. By contrast, people can concentrate on activities that are interesting and motivating (such as computer games) for long periods of time. Such inconsistencies can be difficult to understand for people around them and can be a source of tension and frustration. In this module we introduce methods to assist clients to recognize tasks that may be problematic. We outline external strategies that can be applied to adapt the environment to minimize distraction, which often involves selecting the most appropriate surroundings suitable for success. We introduce strategies to optimize performance, for example, goal setting, and the introduction of breaks, incentives and rewards.

The *Memory Module* (Chapter 4) addresses a very overt difficulty. It is distressing because it is very noticeable when people with ADHD miss appointments, forget important dates, or turn up late without the things that they need. The most common memory problems are short-term memory problems and these are closely associated with attentional difficulties whereby problems with initial processing lead to later difficulties with remembering. Thus this module follows a similar format as the Attention Module by identifying individual memory problems and applying external strategies (such as use of diaries, electronic devices and alarms) and internal strategies (such as repetition, rehearsal, visual cue and use of mnemonics) to overcome them.

The *Organization and Time-Management Module* (Chapter 5) addresses problems that become more marked as children become adolescents and young adults. The ability to organize and prioritize is particularly challenging for people who tend to flit like butterflies from task to task, especially when an activity is mundane, or when beckoned by a seemingly more important task. Unfinished tasks are a source of frustration and leave the individual with a sense of failure. This module presents ways of applying a methodical approach to make plans by reviewing goals for a set time

period (short- and long-term), listing activities, devising a schedule, sequencing and prioritizing activities, and planning breaks and rewards. We also include methods for avoiding pitfalls, such as ways of maintaining attention on a task, ways of adhering to a plan, advice regarding reviewing priorities and avoiding procrastination.

The *Impulsivity Module* (Chapter 6) addresses behaviours that are often closely linked to a low tolerance of boredom, feelings of frustration, a preference for short-term rewards and an inability to delay gratification. People with ADHD find it difficult to wait; they speak out or act without thinking and tend not to engage in a process of consequential thinking. There are obvious social ramifications when individuals present in this manner as they appear to lack consideration for the feelings and needs of others. These behaviours may lead to serious consequences such as delinquency, driving violations and accidental injury. This module introduces self-monitoring techniques to identify situations in which clients are vulnerable to responding in an impulsive way. Stop-and-think techniques are introduced to maximize self-control, including the consideration of personal and social consequences, and the use of self-instructional training and self-statements which are subsequently rehearsed in role-plays.

Part III: Comorbid and Associated Problem Modules

There are several secondary social and emotional sequelae of ADHD. These include: impaired problem-solving skills; poor social skills and interpersonal relationship problems; anxiety; frustration and poor anger control; low mood and depression; sleep difficulties; and substance misuse. We have therefore devised treatment strategies which can be applied to address these areas of comorbid difficulty. Low self-esteem is a problem that is so universal and debilitating for people with ADHD, we have included this as a common thread that is implicitly provided in each of the Young-Bramham Programme modules.

The *Problem-Solving Module* (Chapter 7) examines the reasons that people with ADHD have poor problem-solving skills. This includes impulsive responding, leading to rash decision making and without full evaluation of a situation. They may worry unnecessarily about minor more immediate issues and lose sight of the whole picture. In addition, attention problems may interfere in a functional problem-solving process by them becoming distracted and moving off-task. This module outlines a set procedure to define a problem and distinguish 'problems' from 'worries', generate solutions, evaluate solutions and consider alternatives. A methodology for choosing solutions is introduced through the rehearsal of solutions to evaluate consequences, role-playing appropriate scenarios, and challenging cognitive distortions.

The *Interpersonal Relationships Module* (Chapter 8) addresses disruption to interpersonal relationships. Clients are likely to have experienced a lifetime of adverse interactions with other people and some individuals have underdeveloped social skills. A difficulty maintaining a conversation may be perceived by others as a

lack of interest or fickle behaviour. Impulsivity may feature as a difficulty in turn-taking and social reciprocity. Some clients report a long-standing awareness that they are 'different' from others in some way, leading to feelings of rejection and social isolation. In this chapter we focus on the development of micro-skills (both verbal and nonverbal communication skills) and macro-skills that aim to modify and regulate social behaviour in different social settings. We also discuss a common dilemma for people with ADHD relating to the decision of whether to (or when to) disclose to others that they have the condition.

The *Anxiety Module* (Chapter 9) addresses the generalized and social anxiety problems often present in ADHD clients. Social anxiety is commonly reported by clients and due to their uncertainty in social settings because they have difficulty adhering to social norms. Some clients have such little confidence that they avoid them altogether. This seems paradoxical given their often gregarious presentation and it is important to bear in mind that this may mask underlying anxieties and poor self-confidence. In this module, we discuss how to modify behaviour in varying social situations, including controlling the impulse to overcompensate for feelings of inadequacy by 'playing the fool' and attention seeking behaviour. We also introduce methods to re-interpret common responses to anxiety by evaluating thoughts, feelings, behaviours, and bodily reactions. A version of the Clark (1986) cognitive behavioural model of panic is presented and strategies for intervention, including relaxation and breathing exercises. We suggest ways to overcome avoidance and increase confidence by applying techniques of graded exposure, systematic desensitization, and behavioural experiments.

The *Frustration and Anger Module* (Chapter 10) addresses maladaptive ways of coping with feelings of frustration and irritation. This is often expressed as a labile temperament and characterized by emotional outbursts. Indeed, anger is more likely to be expressed outwardly than inwardly suppressed, possibly due to poor impulse control, poor self-regulation and a low boredom threshold. This behaviour may lead to negative outcomes including relationship breakdown, termination of employment and involvement with the police. It is likely to be perceived by others as a negative character trait and clients may be assumed to be unpredictable or in some cases even dangerous. This module examines the stages of anger from a cognitive behavioural perspective with the aim of identifying 'early warning signs' that will enable the client to interrupt the anger process. Anger management strategies are provided such as distraction, self-talk, relaxation and cognitive reframing techniques. In addition we compare assertiveness and anger, address the difference between insults and criticisms and discuss how to accept constructive criticism appropriately.

The *Low-Mood and Depression Module* (Chapter 11) stresses the need for regular monitoring of low mood and depression which may arise due to a history of negative life events including academic failure, relationship difficulties, financial problems, and low self-esteem. The problems mean that many young people have lacked the opportunity to experience a sense of achievement and mastery. Depression in people with ADHD needs to be taken very seriously due to their poor behavioural control,

which may cause them to impulsively act on an idea to self-harm. In this chapter we have adapted the Beck (1976) cognitive-behavioural model of depression to incorporate the negative thinking and thinking errors common to people with ADHD. We provide suggestions of how to break the negative cycle and introduce strategies that include activity scheduling, techniques to challenge negative automatic thoughts, reduce the self-talk that perpetuates low mood and develop positive self-statements in line with ADHD strengths.

The *Sleep Module* (Chapter 12) addresses the common complaint of incessant feelings of inner restlessness that are associated with ADHD and prevent people from getting to sleep. Other sleep problems may be more similar to disturbance associated with affective disorders such as early wakening in depression. Sleep problems may also relate to medication for treating ADHD, particularly following withdrawal of stimulant medication, or drug holidays or changes in dose. In this module we review the function of sleep, describe the different stages of sleep, and consider how the core symptoms of ADHD may exacerbate sleep problems such as hypersomnia and insomnia. We detail the management of sleep problems, outlining sleep hygiene programmes and relaxation techniques adapted for individuals with ADHD.

The *Substance Misuse Module* (Chapter 13) covers both alcohol and illicit drug use. People with ADHD may become involved with the latter via two mechanisms. Poor impulse control may lead to increased risk taking behaviour, experimentation with drugs and subsequent addiction. A second route is when individuals with undiagnosed and/or untreated ADHD use illicit substances to self-medicate. This chapter describes the different categories of substance use and their relationship with ADHD. Psychological dependency is addressed by suggesting motivational interviewing techniques to motivate the client to engage in a process of change. We present the vicious cycle of substance misuse and discuss dysfunctional beliefs about substance misuse. The module also outlines techniques to build self-confidence and cope with physical cravings and urges by applying distraction techniques, activity scheduling, and motivating support.

Part IV: The Future Module

We recommend that an episode of therapy is always concluded with a final session (or more) that takes a positive perspective and addresses the future. Many people with ADHD have negative assumptions about themselves and an expectation of failure, and it will be helpful to explore how they perceive their future, and make preparations for how they will deal with perceived obstacles and setbacks.

The *Preparing for the Future Module* (Chapter 14) is therefore a concluding module that summarizes the techniques introduced in previous modules, and reviews those that were helpful. The module follows a relapse-prevention approach whereby plans

to identify and manage 'risk' situations are developed that the individual can refer to when they feel vulnerable. This is the time they are most likely to slip back into old habits and the development of these management plans will prepare the client for their eventuality and increase the likelihood that they will respond by applying useful coping strategies and avoid impulsive or dysfunctional responding patterns. It is important that these relapse prevention plans include a variety of options that can be applied to a range of situations, for example, cognitive behavioural techniques, avoidance of troublesome situations/persons, seeking support from family and friends and/or professional advice.

In this module the therapist should also lead the client to examine the positive aspects of their ADHD personality by addressing their functional strengths of creativity, resilience and flexibility. The therapist should draw attention to how the client has applied these characteristics successfully to achieve personal goals. Drawing together these natural adaptive qualities, together with a review of the skills acquired and achievements gained in the course of the therapy, and the preparation for 'going it alone' with the relapse prevention plans will give the client a sense of self-efficacy and purpose. In turn this will enhance the likelihood that the client will succeed in not only addressing the presenting 'here and now' problems that they face in daily life, but will move forward to set and achieve longer term goals.

SUMMARY

The primary intervention for ADHD is pharmacological treatment and this has been reliably shown to provide a reduction in symptoms for many individuals with the condition. However, this may have a 'shelf-life' with benefits limited to short-term (Jensen *et al*., 2007) and inadequate to address the multiple mental health needs and pervasive impairments associated with growing up with ADHD. Symptom reduction is but one treatment objective for ADHD adolescents and adults, who have accumulated a host of concurrent difficulties and who may require psychological interventions to help them cope with the personal, social and occupational demands that they face in everyday life. The Young-Bramham Programme is a comprehensive cognitive behavioural intervention to address the needs of young people with ADHD and includes treatments for core symptoms of ADHD, comorbid and associated problems.