
Adapting CBT for ADHD

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ADHD is a complex neurodevelopmental syndrome of impaired executive functioning that significantly affects, particularly over time, an individual's ability to successfully negotiate the world. As such, treatments need to be integrative and multimodal, and the case conceptualized with consideration of all the individual variables present. Although not all cases of ADHD need treatment beyond medication, many do and it is up to us to identify the more complex presentations and offer these clients a combination of treatments with a good empirical base such that they can make an informed decision on treatment choices.

With queries related to the long-term effectiveness of front-line medications for the treatment of ADHD (Jensen et al., 2007), we are challenged to investigate alternative treatment options. Psychosocial treatments have a solid grounding in empirically based research. Part of a clinician's role is to assist individuals with ADHD to find a "good fit" between their symptoms and their environment. Adults with ADHD are particularly likely to hold core beliefs of inadequacy and display concomitant behaviours, such as avoidance, that exacerbate the core symptoms of inattention, hyperactivity and impulsivity (Ramsay & Rostain, 2005b). Psychosocial treatments, target these secondary problems. Particularly for those identified in adulthood with ADHD, instilling hope and reframing the past may be some of the more important foci of the early stages of therapy.

It is clear that individuals with ADHD, regardless of gender, struggle far beyond the symptoms of ADHD and that these other problems need due consideration when developing treatment plans. As such, many

nonpharmaceutical treatments have evolved over the years for the treatment of ADHD with varying degrees of effectiveness and varying degrees of empirically-based research supporting their effectiveness. Treatments also vary depending on the age of the individual affected by ADHD.

Over 100 studies have found that parent and teacher programs improve child compliance, reduce disruptive behaviours and improve interactions. The programs that specifically offer good outcomes involve operant conditioning, whereas those using a more cognitive-behavioural approach have fared less well, at least in the child literature. The rationale for using behavioural approaches lies in both the neurological research suggesting that neurotransmitter pathways can be modified by behavioural management (e.g. Sagvolden, Aase, Johansen & Russell, 2005) and the evidence that social factors can contribute to the severity and comorbid profiles associated with the disorder. Although the initial results emerging from the MTA study indicated that behaviour management added nothing to the effect of medications, subsequent publications have shown that this was only true for those with uncomplicated ADHD but for those with additional comorbidities (e.g., anxiety and disruptive behavioural disorders), the psychosocial component statistically improved outcomes (Conners et al., 2001). Moreover, data collected 2 years post MTA further diminished the superiority of the medicated groups (Group, 2004). Behavioural treatments are also known to allow for a decrease in the dose of medications used and parents of children receiving both medication and behavioural treatments report more "normalized"

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children compared with parents of children who only received medications (Greene & Ablon, 2001).

There has been increasing interest in the neural mechanisms underlying ADHD and a number of fascinating animal models have been proposed to assist us in understanding the changes that occur at the neuronal level when rewards and punishment reinforcers are in place (see Sagvolden et al, 2005, for a comprehensive review of this theory). The implications of this model are that rewards for individuals with ADHD must be immediate, punishers are less likely to influence behaviours in the long-term with individuals affected by ADHD, and any behavioural programme needs to be maintained over time in order to have any lasting influence on behaviours. In other words, psychosocial treatments serve to provide ADHD individuals with an *external scaffold* that needs to be permanently targeted at the core ADHD symptoms to assist with behaviour management over time.

These ideas are in line with those of Barkley (2006) who described the importance of targeting interventions at the point of performance, that is where the desired behaviour is to occur, rather than in the office where undesirable behaviours are unlikely to be activated. In other words, the further in time a suggested intervention is located, the less effective it is likely to be. This would be true of both behavioural management strategies offered to children as well as CBT interventions distributed to adults with ADHD. Based on the neurocognitive deficits present in individuals with ADHD, it follows that therapies delivered in the clinic are going to be less effective than those directed at environmental reconfigurations, curriculum adjustments, and other options that target the structure of the natural setting (Barkley, 2006). The cognitive deficits also imply that treatments must be sustained over time; if the behavioural treatments and environmental structure created to sustain a behaviour are eliminated, then it makes

sense the treatment effects would largely disappear. This externalising of rewards and punishers is also consistent with behavioural management practices, like token systems. The key is to externalise what should otherwise be internally represented information, be that in the form of cues, lists, reminders, bells, or timers. Maintenance of routines and schedules are also an integral part of behavioural management practices. Of course other issues are also important to manage and modify such as sleep hygiene, diet and exercise (Staller & Faraone, 2006).

Although cognitive-behavioural treatments have lost favour amongst those treating children with ADHD, it has recently been considered as a viable treatment for adults with ADHD. More and more adults are seeking psychotherapy to complement medications, the assumption being that neuropsychological difficulties that stem from the disorder often lead to dysfunctional patterns of thinking, feeling and behaving. Over the last few years, a number of studies have been published investigating the efficacy of using traditional CBT approaches with ADHD adults (e.g., (Rostain & Ramsay, 2006; Safren et al., 2005). CBT focuses on challenging deeply held beliefs *and* developing coping strategies for managing ADHD-related difficulties.

Safren et al. (2005) found that there were significantly more treatment responders among patients who received CBT and medications (56%) compared to those who received only medications (13%). Rostain and Ramsay (2006) used a combined treatment approach for adults with ADHD using a 6 month course of concurrent pharmacotherapy (ADDERall) and CBT (16 sessions). Forty-one percent showed significant improvement based on Brown ADD Scale (BADDS) scores, and there were significant changes on all self-report scales and Clinical Global Impression (CGI) scores, 81% of participants reported at least mild improvement, and 70% reported moderate to significant improvement (see

Ramsey & Rostain, 2005a, for details on modules and modifications of CBT for ADHD). Further, mindfulness approaches based on Marsha Linehan's work with adults with Borderline Personality Disorder, have been piloted and appear promising in the treatment of emotional dysregulation in adults with ADHD (Hesslinger et al., 2002; Solanto, Marks, Mitchell, Wasserstein & Kofman, 2008).

Psychoeducation is also an important component of psychosocial interventions. It is important to discuss ADHD as a handicapping condition; one that can be managed but not cured. Other areas to cover include what medications can and cannot aid, and the fact that medications can equally alleviate inattentive symptoms (Weiss, Worling & Wasdell, 2003). Further, knowing neurocognitive deficits are chronic and difficult to modify permanently over time, it is helpful to discuss these deficits within the context of medications, as medications have been documented to improve some neurocognitive deficits (e.g., Bedard, Martinussen, Ickowicz & Tannock, 2004; McInnes, Bedard, Hogg-Johnson & Tannock, 2007). Risks associated with ADHD may need to be discussed to highlight areas that need additional intervention. For example, we know people with ADHD are at increased risk for driving related accidents (Barkley & Cox, 2007; Fischer, Barkley, Smallish & Fletcher, 2007), with females potentially showing higher risks associated with driving offences, at least in adolescence (Nada-Raja et al., 1997). Adolescent girls with ADHD have a higher risk for teen pregnancy (30-40%; Barkley, Fischer, Smallish, & Fletcher, 2006) and a fourfold increase in risk for sexually transmitted disease (Barkley et al., 2006) compared with non ADHD girls. Because of these risks, they need to be discussed with individual patients as part of psychoeducation, such that decisions about treatment take these risks into consideration. *Vocational rehabilitation* is likely an area of ongoing concern for adults with ADHD. Individuals with ADHD are more likely to quit, terminate and have ongoing

employment difficulties (Murphy, 2005). Tardiness, disorganisation, poor time management and missing deadlines are all some of the things that will interfere with job performance, suggesting that the job may be ill fitted to suit the strengths of the adult with ADHD. Therefore, part of the challenge of working therapeutically with ADHD adults is about vocational counselling and matching patients to jobs. *Coaching* is another area that has developed over the last decade as an adjunctive treatment for adults with ADHD. However, there is no empirical data to support the efficacy of coaching (Murphy, 2005).

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