Evidence-based psychotherapy treatment for adhd and cbt

Evidence-Based Psychotherapy Treatment

Attention Deficit Hyperactivity Disorder (ADHD) + Cognitive Behavioural Therapy (CBT)

Travis O'Connor is a 19-year-old Caucasian male who currently attends The University of Tears (UofT). He is heterosexual and currently single after many failed relationships. He comes from a middle-class income family and is unemployed. For as long as Travis and his family members recall, he would have difficulty sitting still in class and rushing his work resulting in careless mistakes. Homework was a problem for Travis as he strongly disliked it and never seemed to be able to work on it for long without quickly losing his attention. Many times, there would be no attempt at all. He is consistently forgetful of tasks assigned to him and is highly distractible.

Travis has restless quirks, such as bouncing his knee while attempting to sit still or being loud when being quiet is expected. Reports from his peers at school indicate that he tends to talk an excessive amount, and often interrupts others due to his impatience. Finally, Travis has a habit of forcing himself into other's social situations uninvited. As Travis aged, severity of his symptoms showed a small decline, but moderate levels of severity that remained has interfered with his functioning, particularly in social settings.

All of Travis' symptoms point to a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) combined presentation, based on DSM-V criteria of which Travis meets all requirements. Under criteria, for Travis to be diagnosed with ADHD, he must have either at least 5 symptoms of inattention and/or hyperactivity with impulsivity (American Psychiatric Association, 2013) of

which Travis demonstrates 6 in each category. These include; careless mistakes, difficulty sustaining attention, failure to finish assigned tasks, dislike starting tasks, easily distracted, and forgetful in daily activities, which fall under inattention. Travis also demonstrates fidgeting (an inability to be quiet in leisure activities), talking excessively, pre-maturely filling in blanks, impatience, and interrupting others, which falls under hyperactivity and impulsivity (American Psychiatric Association, 2013). Travis must also have had those symptoms present before 12 years of age (American Psychiatric Association, 2013) which seems likely as his family reports that he has always had these symptoms. A further requirement is that symptoms are present in 2 or more settings (American Psychiatric Association, 2013) which can be seen in Travis both at home and school. Furthermore, Travis' symptoms interfere with his daily functioning and are not exclusively seen during the presentation of another disorder (American Psychiatric Association, 2013). These symptoms have devastated Travis' personal life by making it extremely difficult to create and maintain intimate relationships with friends, family, and romantic partners. PART B:

STUDY 1: Safren, Otto, Sprich, Winett, Wilen, & Biederman's (2005) clinical trial consisted of 31 adults completing the study. All met DSM-IV criteria for ADHD and were actively receiving treatment via medication. 13% of participants were minorities and the experiment was performed in an American hospital (Safren et al., 2005).

Participants were randomly assigned to two groups. The experimental group was treated with Cognitive Behavioural Therapy for ADHD and pharmacological treatment (CBT) (N = 16). Control group was

pharmacological treatment/treatment as usual (TAU) (N = 15) (Safren et al., 2005).

In the CBT group, patients were put through a modular approach based on the work of Eifert, Schulte, Zvolensky, Lejuez, & Lau (1997), consisting of three core and three optional modules (Safren et al., 2005). Each module was based on specific areas that those with ADHD found difficulties functioning in (Safren et al., 2005), which was inspired by Henin, Otto, & Reilly Harrington's (2001) approach to CBT treatment. The first module consisted of educating participants on ADHD and training them in organization and planning. This included calendar and list tasks which took place over four sessions. The second module consisted of reducing distractibility through learning one's own attention span. Once that had been accomplished, participant's chunked tasks into their personal time lengths, with the assistance of alarms, to keep track of time. This was taught over three sessions. The third module consisted of adapting to stressful situations through cognitive restructuring. The three optional modules consisted of applying learned skills to procrastination and anger management through cognitive restructuring, and developing communication skills (Safren et al., 2005). Those in the TAU condition completed initial assessment and returned 15 weeks later for outcome assessment (Safren et al., 2005).

Effectiveness of the treatments was operationalized using the scores of participants on the ADHD rating scale (DuPaul, Power, Anastopoulos, & Reidand, 1998), Clinical Global Impression scale (CGI) (NIMH, 1985), and a self-report inventory using Current Symptom Severity (CSS) (Barkley & Murphy, 1998) at baseline and outcome, with Hamilton Depression + Anxiety

& Beck Depression + Anxiety scores being used as a secondary outcome measures (Safren et al., 2005). The ADHD rating scale consisted of a rating between 0 and 3, with 0 indicating not having ADHD and 3 indicating extreme presence of ADHD (Dupaul et al., 1985; Safren et al., 2005). The CGI for ADHD also measured severity on a scale of 1 to 7, with a score of 1 equating to free of illness and 7 equating to severely ill (NIMH, 1985; Safren et al., 2005). Finally, at the end of each assessment phase, patients would complete a CSS (Barkley & Murphy, 1998; Safren et al., 2005).

On the ADHD rating scale, results showed a reduction from 29. 37 at baseline to 15. 19 posttreatment in the CBT condition and a reduction from 26. 00 to 20. 80 in the TAU condition (Safren et al., 2005). Based on these results, I calculated that there was on average a 48. 3% reduction in ADHD severity in the CBT condition and a 20. 0% reduction in severity in the TAU condition. This means that CBT was approximately 28. 3% more effective under the ADHD rating scale than the control. On the CGI scale, the severity was reduced from baseline 5. 00 to 3. 31 posttreatment in the CBT condition, and from baseline 4. 67 to 4. 13 posttreatment in the TAU condition (Safren et al., 2005). I calculated that this means on average the CBT condition reduced severity 33. 8% and the TAU reduced severity by 11. 6%. This means that the CBT condition was approximately 22. 2% more effective under the CGI scale. On the self-report CSS, severity was reduced from baseline 29. 69 to 14. 75 posttreatment in the CBT condition, and from baseline 26. 40 to 23. 87 posttreatment in the TAU condition (Safren et al., 2005). I calculated that on average, the CBT condition approximately reduced severity by 50. 3% and the TAU approximately reduced severity by

9. 6%. This means that the CBT condition was approximately 40. 7% more effective under the CSS scale.

The first major finding from the study was that results of CBT with medication, in comparison to just taking medication, demonstrated that CBT was a more effective method of reducing symptoms (Safren et al., 2005). The secondary outcome results showed that those who participated in CBT had considerably lower scores for anxiety and depression on both measures, separate from treatments effects on ADHD symptoms.

A couple of limitations that Safren et al. (2005) faced included a limited sample size which runs the risk of not being transferable to the general population. Another issue was that participant's pharmacology was not controlled for, which resulted in two patients changing their medication. Although, this did not impact results when they were removed from the data. A further limitation was that Safren et al. (2005) only studied outcome results and did not observe the follow up period to ensure results were maintained once treatment was completed. This issue was taken into consideration and solved in their later experiment (Safren et al., 2010). The final limitation of Safren et al.'s (2005) study was that the comparison group was pharmacological in nature and not an alternate CBT.

STUDY 2: Safren et al.'s (2010) follow up study to their 2005 experiment consisted of 86 adults diagnosed with ADHD under DSM-IV criteria who were already receiving treatment via medication (79 completed treatment, 70 completed follow up assessments). The study also took place in an American

Hospital, this time between November of 2004 and June of 2008 (Safren et al., 2010).

Participants were randomly assigned to two groups. The experimental group: Cognitive Behavioural Therapy for ADHD (CBT) (N = 43), and the control group: Relaxation With Education (RwE) (N = 43) (Safren et al., 2010). In both groups, 10% of participants were minorities and consisted of 24 males and 19 females (Safren et al., 2010).

In the CBT group, patients were put through three core and two optional modules based on an earlier edition of the manual for ADHD focused CBT made by Safren, Sprich, Perlman & Otto's (2017) team (Safren et al., 2010). The first module consisted of educating participants on ADHD and training them in problem solving skills along with organization and planning. This included time optimization methods and calendar/list tasks which all took place over four sessions. The second module consisted of reducing distractibility through skills such as knowing one's own attention span length which was taught over two sessions. The third module consisted of adapting to stressful situations through cognitive restructuring over 3 sessions. The two optional single sessions consisted of a family member presence and skill application (Safren et al., 2010).

In RwE condition. participants went through four modules, the first consisted of a single session of training in muscle relaxation techniques, ADHD education, and psychotherapy. The second module consisted of six sessions of progressive muscle relaxation training. The third session consisted of four sessions of applying learned techniques to ADHD. The final single session

consisted of review and future planning to use learned techniques when feeling distracted (Safren et al., 2010).

Effectiveness of treatments was operationalized using scores of participants on the ADHD rating scale (DuPaul, Power, Anastopoulos, & Reidand, 1998) and Clinical Global Impression scale (CGI) (NIMH, 1985) at baseline, post-treatment, a 6 month follow up, and a 12 month follow up. A self-report inventory on Current Symptom Severity (CSS) (Barkley & Murphy, 2006) was used as a secondary outcome measure (Safren et al., 2010). The ADHD rating scale consisted of a rating between 0 and 3, 0 indicating not having ADHD and 3 indicating extreme presence of ADHD (Dupaul et al., 1985; Safren et al., 2010). The CGI for ADHD also measured severity on a scale of 1 to 7, 1 equating to free of illness and 7 equating to severely ill (NIMH, 1985; Safren et al., 2010). Finally, at each assessment phase, patients would complete a CSS (Barkley & Murphy, 2006; Safren et al., 2010).

On the ADHD rating scale, results showed a reduction from 26. 44 at baseline to 14. 46 posttreatment in the CBT condition and a reduction from 25. 33 to 19. 19 in the RwE condition (Safren et al., 2010). Based on these results, I calculated that there was on average a 45. 3% reduction in ADHD severity in the CBT condition and a 24. 2% reduction in severity in the RwE condition. This means that CBT was approximately 21. 1% more effective under the ADHD rating scale than an equivalent control. On the CGI scale, the severity was reduced from baseline 4. 74 to 3. 20 posttreatment in the CBT condition, and from baseline 4. 63 to 3. 73 posttreatment in the RwE condition (Safren et al., 2010). I calculated that on average the CBT condition reduced severity 32. 5% and the RwE reduced severity by 19. 4%. This

means that the CBT condition was approximately 13. 1% more effective under the CGI scale. On the self-report CSS, the severity was reduced from baseline 24. 73 to 11. 84 posttreatment in the CBT condition, and from baseline 26. 40 to 19. 12 posttreatment in the RwE condition (Safren et al., 2010). I calculated that on average the CBT condition approximately reduced severity by 51. 4% and the RwE approximately reduced severity by 27. 6%. This means that the CSS condition was approximately 23. 8% more effective under the CSS scale.

What these results demonstrate is that firstly, in comparison to RwE, CBT is a more effective method for managing symptoms of ADHD, solidifying its potential as a treatment method for ADHD in combination with medication (Safren et al., 2010). Secondly, follow up scores demonstrate that participants in the CBT condition much more likely to continue using treatment techniques learned, but also that CBT participants tended to retain significantly lower scores long-term in comparison to RwE participants (Safren et al., 2010).

Although CBT was shown to be more effective than an alternative non-psychotherapeutic treatment when combined with medication, the study was limited in that if participants medication was altered before the 12-month period finished, a potential confounding variable was created in which alternative medication could be responsible for later results (Safren et al., 2010).

PART C: Although the exact cause of ADHD is currently unknown, there are genes associated with the condition. In terms of how symptoms manifest in

daily life, examples can include impaired academic and occupational functioning, higher likelihood of unemployment, social rejection, and increased interpersonal conflict (American Psychiatric Association, 2013).

According to the “ Mastering your adult ADHD: A cognitive-behavioral treatment program: Therapist guide,” 20-50% of those with ADHD are unresponsive to medication, and of those that do respond, typically only 50% of core symptoms are suppressed by medication (Safren et al., 2017). CBT in addition to pharmacological treatment helps those with ADHD manage their symptoms by developing “ concrete strategies and skills for coping with associated functional impairment” (Safren et al., 2017, p. xvii), for symptoms that medication won’t suppress.

Three main techniques used in CBT for ADHD include: “(1) psychoeducation/organizing and planning, (2) coping with distractibility, and (3) cognitive restructuring (adaptive thinking)” (Safren et al., 2017, p. xxiv). Psychoeducation, organizing, and planning consists of using tools such as calendars, task lists, and developing problem-solving skills and organizational systems (Safren et al., 2017). Coping with distractibility consists of learning how long one can focus in each period, then using that knowledge with the assistance of alarms to do tasks in chunks (Safren et al., 2017). Finally, cognitive restructuring consists of taking a more positive perspective and adapting a rational frame point to more efficiently analyze situations (Safren et al., 2017).

Although Travis O’Connor’s ADHD has potential to be treated through pharmacological means, this would likely only reduce core symptoms (Safren

et al., 2017). Travis' particularly severe issues that medication wouldn't be as useful for are " underachievement, unemployment or underemployment, economic problems, and relationship difficulties" (Safren et al., 2017, p. xxiv), and he would benefit from additional skills that come from CBT for ADHD.

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