ADULT ADHD: A SURVEY OF CURRENT PRACTICES IN PSYCHOLOGY

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Abstract

The recognition of attention-deficit/hyperactivity disorder (ADHD) as a condition that persists into adulthood is steadily growing; however, it remains significantly underdiagnosed and undertreated. The current study examined the diagnostic and treatment practices of psychologists throughout Canada regarding adult ADHD, with a focus on identifying the impact of misconceptions, beliefs, and prior training on these practices. Additionally, the study investigated psychologists' interest in receiving future training. The present study employed an online survey methodology and involved 231 registered psychologists living and practising in Canada. The results revealed that the primary reasons psychologists decline adult ADHD assessment and treatment referrals include insufficient training, lack of interest, and perceived incompetence. Certain beliefs were identified as significant negative predictors of accepting adult ADHD assessment referrals, including "ADHD should be assessed and treated by individuals with specialized training in this area of psychology" and "most adults seeking assessment for ADHD are malingering to receive stimulant medication." Significant correlations were identified between specific beliefs and training level, and between specific beliefs and screening for ADHD in the initial intake. The study also identified significant differences in beliefs and training levels between individuals who work with adult ADHD in their practice and those who do not. Moreover, training emerged as a significant predictor of accepting adult ADHD assessment referrals

and addressing specific ADHD symptoms in therapy. The results highlight the pressing need for additional training in adult ADHD diagnosis and treatment to reduce stigma and to improve access to psychological services for the ADHD population. A comprehensive training program is proposed and consists of various topics, such as the presentation of ADHD in adulthood, best practices in assessment and treatment, and dispelling prevalent misconceptions surrounding ADHD. Limitations of the study and suggestions for future research and policy change are discussed.

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Chapter I: Literature Review

In today's fast-paced and demanding world, there is an increased requirement on attention, focus, and organization in adult life. However, many adults find themselves grappling with attentional deficits that they may not fully understand, but that hinder their daily functioning and quality of life. The challenging circumstances faced by these individuals raise important questions: Where can they turn for specialized services? What about those adults who remain unaware of their condition or who face the additional burden of comorbidities like anxiety or depression? Are they able to find psychotherapeutic interventions available to address their unique needs?

Existing research paints a disconcerting picture, revealing a prevailing trend of undiagnosed, misdiagnosed, or untreated adult attention-deficit/hyperactivity disorder (ADHD; Asherson et al., 2012; Ginsberg et al., 2014; Kooij et al., 2010; Kooij et al., 2019). This not only deprives individuals of appropriate support but also subjects them to enduring consequences and substantial impairments across various areas of life (Barkley & Brown, 2008; Bernardi et al., 2012; Faraone et al., 2005; Gerhand & Saville, 2022; Krishnadas et al., 2022; Rivas-Vazquez et al., 2023; Walters, 2018).

Unfortunately, despite the profound impact of ADHD across the lifespan and the importance of effective interventions, the existing literature offers limited insights into the practices of psychologists in diagnosing and treating this

condition in adults. This research gap served as a catalyst for the current study, which was designed to answer the aforementioned questions, shed light on the existing gaps in services, and explore the potential for enhanced training and intervention strategies. Ultimately, by contributing to the research on adult ADHD diagnosis and treatment, the goal was to improve the lives of individuals struggling with attentional deficits and provide a foundation for more effective support systems.

Attention-Deficit/Hyperactivity Disorder

ADHD, a neurodevelopmental disorder that typically begins before the age of 12 years (American Psychiatric Association, 2022), was once thought to only be a childhood disorder (Bokor & Anderson, 2014). However, it is now accepted by most experts in the field as a neurobiological condition that persists into adulthood, causing significant impairments in social, emotional, and occupational functioning (Barkley, 2014; Faraone et al., 2005). ADHD has been estimated to affect between 2.5% and 5% of the adult population (American Psychiatric Association, 2022; British Columbia Medical Association, 2009), and some research indicates that even this is an underestimation (Ginsberg et al., 2014; Song et al., 2021).

The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Revised Version* (*DSM-5-TR*) defines ADHD as "a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development"

(American Psychiatric Association, 2022, p. 68). ADHD has three subtypes: inattentive, hyperactive/impulsive, and combined type (American Psychiatric Association, 2022). In children, adolescents, and adults, the inattentive presentation is characterized by challenges in attending to details, task organization, sustained mental effort, forgetfulness, distractibility, and task initiation and completion, among other impairments. In contrast, the hyperactive/impulsive classification involves restlessness, fidgetiness, excessive talkativeness, impatience, and impulsivity (American Psychiatric Association, 2022). Though externalized hyperactivity tends to decrease with age, research shows that in adulthood, it may transform into internalized restlessness and fleeting thoughts. Emotional dysregulation and irritability also tend to persist into adulthood (Adler & Cohen, 2004; American Psychiatric Association, 2022; Pinzone et al., 2019). Conversely, impulsivity often persists into adulthood without significant decline, resulting in more adverse consequences for adults (Bokor & Anderson, 2014). Despite the established diagnostic criteria, the clinical presentation of ADHD is considered widely heterogenous with a "wide spectrum of severity and symptoms that partially overlap with other conditions" (Franke et al., 2018, p. 1061). For example, symptoms of ADHD overlap with many neurodevelopmental disorders (e.g., specific learning disorders, tic disorders, and autism spectrum disorder), behavioural disorders (e.g., oppositional defiant disorder, conduct disorder, antisocial personality disorder), substance use

disorders, disruptive mood dysregulation disorder, bipolar disorder, and borderline personality disorder (BPD; Franke et al., 2018).

Across the lifespan, a common factor that is significantly impacted for individuals with ADHD is executive dysfunction (Adler et al., 2017; Boonstra et al., 2005), a factor involved in many psychiatric conditions (Rabinovici et al., 2015). Executive functions are a collection of neurobiological processes in the frontal cortex responsible for guiding, directing, and managing cognitive, emotional, and behavioural functions that are important in problem solving toward a goal (Gioia et al., 2000; Low et al., 2021; Strauss et al., 2006). These functions include inhibition, shifting, emotion regulation, initiation, working memory, planning/organization, self-monitoring, and organizing materials (Gioia et al., 2000; Welsh & Pennington, 1988). Impairments in these domains give rise to difficulties with self-restraint, self-awareness, self-talk, emotional control, motivation, and problem solving, leading to significant difficulties in many areas of life (Barkley & Murphy, 2010).

Adverse Consequences of ADHD

The consequences of ADHD on various aspects of adult life are vast and far-reaching. Studies have shown that adults with ADHD exhibit lower educational attainment and employment instability, more frequent motor vehicle accidents and violations, and higher rates of antisocial or violent activity than their non-ADHD peers (Beauchaine et al., 2020; Canu & Carlson, 2004). Social-

emotionally, adults with ADHD present with lower self-esteem and significant problems with self-concept, leading to impairments in various domains, including school, life skills, family life, and social activities (Roselló et al., 2020). Adults with ADHD express difficulties associated with romantic relationships, including relational satisfaction, frequency of dating, and degree of support felt from friends, mediated by deficits in emotional regulation (Bodalski et al., 2019; Robin & Payson, 2002; Wymbs et al., 2021). Additionally, adults with ADHD suffer from marriage problems and increased divorce rates significantly more often than individuals without ADHD (Abdel-Hamid et al., 2011; Bruner et al., 2015; Kahveci Öncü & Tutarel Kişlak, 2022). On a positive note, studies indicate that self-esteem and social functioning difficulties tend to improve with treatment (pharmacological, therapeutic, or combination; Cook et al., 2014; Harpin et al., 2016).

ADHD is also associated with increased rates of familial conflict, unintentional injuries or trauma, substance use disorders, decreased work performance, financial distress, suicide, and higher healthcare costs (Beauchaine et al., 2020; Bernardi et al., 2012; Bokor & Anderson, 2014; British Columbia Medical Association, 2009; Fuermaier et al., 2021; Harpin, 2005; Holst & Thorell, 2020). Additionally, a data analysis study conducted during the COVID-19 pandemic showed that individuals with untreated ADHD were at a higher risk

for contracting COVID-19, with stimulant use being a protective factor (Merzon et al., 2021).

Adult ADHD, defined as ADHD occurring in individuals 18 years or older (Faraone et al., 2006), is also associated with a high prevalence of *DSM-5* psychological comorbidities such as depressive disorders, anxiety, obsessive-compulsive disorder, bipolar disorder, personality disorders, learning disabilities, and drug and alcohol use disorders, among others (Bitter et al., 2019; Rasmussen & Levander, 2008; Schiweck et al., 2021). Research indicates that the co-occurrence of ADHD with other psychological disorders can be observed in as many as 90% of these individuals (Nutt et al., 2007).

On a positive note, early diagnosis and treatment (pharmacological, non-pharmacological, or multimodal), starting as early as age 8 years, have been suggested as protective factors against many of these co-occurring issues (Harpin et al., 2016). A systematic review of 351 studies examining long-term outcomes in ADHD (i.e., more than 2 years) revealed two important findings: (a) people with untreated ADHD had poorer long-term outcomes compared to people without ADHD, and (b) treatment for ADHD improved long-term outcomes compared with untreated ADHD (M. Shaw et al., 2012). Though treatments were not considered to completely restore functioning to that of non-ADHD individuals, it effectively prevented deterioration from baseline or significantly improved impairments in the areas of drug use/addictive behaviour, social

function, academic achievement, self-esteem, occupation, driving, and obesity (M. Shaw et al., 2012). In essence, therapy, medication, or a combination thereof can display the potential to positively impact the trajectory of ADHD-related difficulties and enhance overall well-being, highlighting the importance of early detection and intervention.

ADHD Diagnosis

In Canada, ADHD can be assessed and diagnosed by various practitioners, including family physicians, adult psychiatrists, psychologists, and neurologists. Except for psychologists, practitioners in Canada are generally covered under provincial health plans (Canadian ADHD Resource Alliance [CADDRA], 2021). Psychological assessment is typically the most comprehensive. To be assessed by a psychologist in Canada, the assessment fee can range from 1,000 to upwards of 3,200 Canadian dollars (Centre for Addiction and Mental Health, 2023). To see a psychiatrist or neurologist, a referral from a family physician or walk-in clinic is typically required (CADDRA, 2021).

In contrast, a referral is not needed to see a family physician or psychologist. Of these medical professionals, only psychologists are unauthorized to prescribe medication in Canada.

Guidelines from CADDRA (2021) indicate that an adult ADHD assessment should include psychological measures, a detailed medical and

psychiatric history, screening to rule out any possible physical disorders, and a vision and hearing test.

Diagnostic Criteria

The *DSM-5-TR* and the International Classification of Diseases, 10th Revision (ICD-10), are the most commonly used manuals for diagnosing psychological disorders (First et al., 2018). The criteria for ADHD between the *DSM-5-TR* and ICD-10 do not vary significantly and are considered complementary (Doernberg & Hollander, 2016). The focus in this paper is on the *DSM-5-TR* diagnostic criteria for ADHD, as a majority of Canadian mental healthcare professionals rely on this measure (Kogan & Paterniti, 2017).

The *DSM-5-TR* diagnostic criteria for adults, which have not changed from the previous *DSM-5* version, are outlined in Figure A1 in Appendix A. Despite the centrality of executive dysfunction in ADHD, the *DSM-5-TR* criteria do not explicitly address this aspect (Adler et al., 2017). Some researchers thus suggest that adults with ADHD exhibit symptoms that extend beyond the *DSM-5* criteria (Anbarasan et al., 2020; Barkley & Brown, 2008; Weiss & Weiss, 2004). Barkley and Brown (2008) suggested the consideration of the following criteria when diagnosing ADHD in adults in addition to the previously mentioned *DSM-5-TR* criteria:

- Is easily distracted.
- Makes impulsive decisions.

- Has difficulty stopping activities or behaviours when they should be stopped.
- Starts projects or tasks without reading or listening to directions.
- Does not follow through on promises or commitments.
- Has trouble doing things in the proper order or sequence.
- Drives a motor vehicle much faster than others (excessive speeding) or has difficulty engaging quietly in leisure activities.
- Has difficulty sustaining attention in tasks or recreational activities.
- Has difficulty organizing tasks and activities.

Since the arrival of the *DSM-5*, few studies have been published examining best practice assessment guidelines for adult ADHD. Fortunately, there are some resources available for those clinicians who do assess the disorder. CADDRA recommended a list of steps for Canadian psychologists in assessing and diagnosing adult ADHD. They suggested initial information gathering using a screener such as the Adult ADHD Self Report Scale (ASRS), which has a high internal consistency, concurrent validity, high sensitivity, and moderate positive predictive power (Adler et al., 2006; Hines et al., 2012). CADDRA also suggests a medical review including nutrition and lifestyle habits, and an ADHD-specific interview where developmental history, strengths and weaknesses, and other contributing factors (e.g., learning or psychosocial issues) are reviewed (CADDRA, 2020). J. L. Young and Goodman (2016) suggested similar best

practice guidelines for adult ADHD, including *DSM-5* diagnosis, adult ADHD screening questionnaires, and quality of life scales such as the Adult ADHD Quality of Life Scale (AAQoL) or the ADHD Impact Module-Adult (AIM-A). The AAQoL shows high convergent validity with the Conners' Adult ADHD Rating Scales (CAARS), strong convergent validity with the Behavior Rating Inventory of Executive Functioning for Adults (BRIEF-A), good discriminant validity, and good responsiveness (Brod et al., 2015). The AIM-A shows a strong correlation with the ADHD Rating Scale; strong discrimination ability based on severity, subtype, and medication experience; and sensitivity to change (Landgraf, 2007).

Assessment Measures

Apart from initial screeners and a detailed clinical interview, both ADHD-related questionnaires and neuropsychological measures are used by clinicians assessing adult ADHD. Table A1 (adapted from Adler et al., 2015; see Appendix A) includes a list of assessment measures frequently used for adult ADHD assessment, including self- and informant-rating scales, such as the WEISS Functional Impairment Rating Scale (WFIRS; Weiss, 2000), Browns Attention Deficit Disorder Symptom Assessment Scale (BADDS), CAARS (Conners et al., 1999), and BRIEF-A (Gioia et al., 2000), as well as neuropsychological measures, such as the Conners Continuous Performance Test (CPT; Conners, 2000), Go/No Go, Stop Signal Task, Trail Making Test, and Iowa Gambling Task. Depending

on the measures used, an ADHD assessment may take anywhere from just over 1 hour to nearly 5 hours (Fuermaier et al., 2019).

Debate Regarding Neuropsychological Testing for ADHD

Though many clinicians diagnosing ADHD will implement neuropsychological testing, CADDRA does not include the use of these measures in its best practice guidelines. Some experts agree that neuropsychological tests are unnecessary to diagnose the condition and can even complicate or obscure diagnosis (Barkley, 2019; Fuermaier et al., 2019; Mapou, 2019). For example, studies have shown that self-ratings of executive functioning outperform neuropsychological measures in their predictive value for occupational functioning in individuals with ADHD (Barkley & Fischer, 2011; Barkley & Murphy, 2010). In both adults and children, neuropsychological measures have been found to have a relatively poor ability to predict an ADHD diagnosis (Mostert et al., 2015; Sjöwall et al., 2013). Additionally, though there are distinct cognitive patterns associated with ADHD, researchers have not yet agreed on a neuropsychological profile that is characteristic of the disorder (Arnett et al., 2022; Wasserstein, 2005).

In a comprehensive review of 962 articles, Rosso et al. (2023) found no support for the use of any neuropsychological battery in accurately distinguishing ADHD from other psychiatric disorders. This finding may stem from the inherent focus of neuropsychological measures on assessing executive functioning deficits.

Notably, neuropsychological tests assessing executive functioning tend to have poor ecological validity in general (Chaytor & Schmitter-Edgecombe, 2003). That is, executive dysfunction is prevalent across a spectrum of psychological disorders, such as anxiety, depression, learning disabilities, autism, and schizophrenia (Barnard et al., 2008; DeBattista, 2005; Stirling et al., 2006; Warren et al., 2021). Further, executive functioning tests tend to struggle to emulate real-world conditions, mainly because they are administered in a controlled, artificial environment, with materials and response choices provided by a clinician. In the real world, executive functioning tasks tend to occur in loosely structured environments, require initiation by the client, and response choices are more varied (Bertens et al., 2023). Researchers have suggested that individuals with ADHD are "consistently inconsistent" (Marshall et al., 2021, p. 183) in their performance on neuropsychological tests over time, as they can often muster and direct their attention for short durations for the purpose of testing (Marshall et al., 2021).

Nevertheless, continuous performance tests (CPTs), when used in combination with clinical interview instruments, have been found to be more useful in distinguishing ADHD from mixed clinical controls (Rosso et al., 2023). CPTs, which typically take around 15 minutes to administer, are widely used neuropsychological measures designed to assess attentiveness, sustained attention,

vigilance, and impulsivity through the evaluation of omission or commission errors, reaction time, and reaction time variability (Rosso et al., 2023).

Lengthier neuropsychological measures, such as the Delis-Kaplan Executive Function System (DKEFS), are considered to hold a purpose in ADHD testing, but not for initial identification of the disorder. Research indicates that they are most relevant for adults with a preexisting ADHD diagnosis, with their primary purpose being to provide a profile of neuropsychological strengths and weaknesses to help inform treatment planning (Fuermaier et al., 2019).

Taken together, these findings indicate that adult ADHD is most efficiently diagnosed through an intake interview, self- and informant-report questionnaires, and a short neuropsychological measure, such as a CPT. Therefore, the utility of complex neuropsychological measures for diagnosing ADHD is in question, especially given the time it adds to an assessment, and therefore the additional costs for clients. Given that the use of neuropsychological measures is not recommended by ADHD-specific organizations like CADDRA, it begs the question of why many clinicians still rely on these measures for ADHD diagnosis.

Remote Assessment

In the wake of the COVID-19 pandemic, telehealth psychology practices have grown in popularity. As a result, research exploring remote psychology practice has emerged, with evidence to show that ADHD assessments via

telehealth can be implemented while maintaining high standards (Bilder et al., 2020; Santosh et al., 2023). Most ADHD rating scales, such as the CAARS (Conners et al., 1999) and BRIEF-A (Gioia et al., 2000), and some neuropsychological measures, such as the Integrated Visual and Auditory Continuous Performance Test Second Edition (IVA-2 CPT), now offer online formats for remote administration. Comprehensive intake interviews can be effectively conducted over online telehealth platforms such as Zoom and Doxy (Shklarski et al., 2021), offering increased convenience and flexibility for clients and practitioners. This is particularly advantageous for practitioners who exclusively work online and are licensed in multiple provinces, as it allows them to see clients from different regions or provide services from abroad during parts of the year. Consequently, reduced waitlists and improved clinician availability can be expected as a positive outcome of these developments.

Missed Diagnosis

In an ideal world, individuals with ADHD would be identified and diagnosed during childhood when symptoms first emerge, providing the greatest opportunity to mitigate potential adverse outcomes (Sonuga-Barke et al., 2011). However, many studies show that this is not the case for many. Fewer than 20% of adults with ADHD were found to be currently aware of their diagnosis or receiving treatment (Fayyad et al., 2007; Newcorn et al., 2007; Retz et al., 2011). Numerous factors can contribute to the possibility of missing an ADHD

diagnosis, such as a lack of awareness or understanding of ADHD among parents, teachers, and healthcare providers; fear of overmedicating the population (Franić & Ćurković, 2018; Steinau, 2013); and factors that can mask or diminish the visibility of ADHD symptoms, such as anxiety, high intelligence, academic achievement, and nontraditional presentations of the disorder (Agnew-Blais et al., 2016; Bélanger et al., 2018; Mullet & Rinn, 2015; Rivas-Vazquez et al., 2023).

One significant reason for missed diagnoses is the limited knowledge or awareness of ADHD among those involved in a child's life. Parents, teachers, and even healthcare professionals may have insufficient understanding of the specific signs and symptoms of ADHD, leading to oversight or misattribution of behaviours. Consequently, children may not receive the necessary evaluations and interventions to help identify and manage their condition (Kooij et al., 2010).

Various factors can also play a role in obscuring ADHD symptoms. Some children may have a supportive family environment or possess highly developed cognitive skills, allowing them to compensate for their ADHD-related challenges effectively. They may learn to hide or mask their difficulties, making it less apparent to others that they struggle with attention, impulsivity, or hyperactivity (Mullet & Rinn, 2015).

Comorbid Conditions and Differential Diagnosis

The presence of comorbid conditions can complicate the diagnosis of ADHD. Research shows that when individuals seek treatment at psychiatric

clinics, medical professionals often focus on diagnosing and treating their coexisting disorders rather than addressing the underlying ADHD (Fayyad et al., 2007).

As previously mentioned, individuals with ADHD often experience concurrent conditions such as learning disabilities, anxiety, or mood disorders (Gnanavel et al., 2019). The coexistence of these conditions can change the clinical presentation of ADHD, making it more challenging to isolate and recognize the primary symptoms, potentially leading to a delayed or missed diagnosis (D'Agati et al., 2019). These conditions can complicate the diagnosis and treatment of ADHD for clinicians and may make it more challenging to detect a positive diagnosis (Bélanger et al., 2018; Kooij et al., 2010). For example, difficulty with concentration and focus is a hallmark symptom of ADHD but also a symptom of depression and anxiety (American Psychiatric Association, 2022). Additionally, when ADHD co-occurs with anxiety, anxiety can prevent the typical inhibitory dysfunction present in ADHD, masking some of the symptoms such as impulsivity or overt restlessness (D'Agati et al., 2019). Moreover, co-occurring mental health conditions can worsen the symptoms of ADHD and make it more difficult to manage. For example, anxiety can exacerbate sleep problems and restlessness, and depression can lead to difficulties with motivation and productivity (American Psychiatric Association, 2022; D'Agati et al., 2019).

Some research shows that ADHD may even be the root cause of some of these disorders (Gair et al., 2021; Powell et al., 2021; Riglin et al., 2021). Several longitudinal studies investigated the association between childhood ADHD and adulthood depression (Powell et al., 2021; Riglin et al., 2021). They provided evidence that the environmental factors that often accompany ADHD, such as discordant relationships, peer victimization, friendship difficulties, and academic underachievement, may contribute to the emergence of depressive disorders later in life (Powell et al., 2021; Riglin et al., 2021). Another longitudinal study found evidence that early ADHD symptoms may lead to the development of anxiety symptoms, mainly when ADHD symptoms are high in early childhood (Gair et al., 2021).

In brief, though the ideal scenario entails the early detection of ADHD in childhood, the reality is that it does not always occur. Clinicians working with adults must be aware of the possibility that not all adults with ADHD have received a childhood diagnosis and, therefore, must screen and assess for the condition when conducting any type of assessment. Clinicians must also be cognizant of the possibility of co-occurring mental health conditions and the reciprocal influence of comorbid diagnoses on each other.

Pathway to Adult ADHD Diagnosis

The identification of ADHD in adults who were not diagnosed as children has been explored by several researchers (Gilmore et al., 2022; Hesslinger et al.,

2002; Miller, 2018). Frequently, adults who have not received an ADHD diagnosis will initially seek psychological assistance to alleviate the consequences of coexisting conditions associated with their ADHD, such as marriage issues, sleep disturbances, substance abuse, or to manage comorbid disorders, such as anxiety and depression (Hesslinger et al., 2002). Sometimes, parents of children with ADHD may identify similar symptoms in themselves, prompting them to conduct their research and seek assessment (Miller, 2018). In recent years, social media outlets, such as Facebook, Instagram, and TikTok, have become informative and accessible sources of information on ADHD (Gilmore et al., 2022). Users share their experiences, struggles, and knowledge on symptomatology and treatment, often offering helpful tips and tricks on coping mechanisms and treatment options. Though perhaps not the most reliable source of information, this type of content has allowed individuals who may have never considered ADHD to be a possibility to self-identify with the condition and seek professional diagnosis and treatment (Gilmore et al., 2022).

Reasons for Underdiagnosis

Regrettably, despite the availability of tools and best practice guidelines, as well as emerging research on ADHD assessment, the underdiagnosis of ADHD in adults persists, especially in cases where coexisting psychiatric conditions are present (Barkley & Brown, 2008; Ginsberg et al., 2014). To understand this phenomenon, several research studies on the practices of psychologists in

diagnosing and treating adult ADHD has been conducted with nurse practitioners, psychiatrists, and primary care physicians. Findings indicate that improper practices among practitioners, lack of training, and misconceptions and stigmas serve as the primary culprits contributing to the underdiagnosis of ADHD (Callen et al., 2023; Conca et al., 2021; Faraone et al., 2004; French et al., 2019; Knutson & O'Malley, 2010; Müller & Asherson, 2012; Sciutto, 2013).

In psychiatry and primary care settings, studies have shown there is a high rate of missed diagnostic opportunities and underdiagnosis of adult ADHD, as well as a shortage of practitioners available to diagnose the condition (Conca et al., 2021; Faraone et al., 2004). Four barriers to effective diagnosis and treatment have been identified in this population: "(1) need for education, (2) misconceptions and stigma, (3) constraints with recognition, management, and treatment, and (4) need for a multidisciplinary approach" (Callen et al., 2023, p. 576). Similar findings emerged with nurse practitioners, where lack of confidence in diagnostic and treatment practices was the primary cause of significantly low rates of adult ADHD diagnosis (Knutson & O'Malley, 2010). Nonetheless, there is a lack of research of this nature on psychologists' practices in diagnosing and treating adult ADHD.

Stigma. Stigmas relating to ADHD are reportedly quite prevalent among mental health professionals and the public (French et al., 2019; Sciutto, 2013). Despite the evidence that ADHD is a neurobiological condition, there is evidence

to indicate that ADHD continues to be misunderstood as a "behavioural problem related to bad parenting, an attachment disorder, the result of food additives, watching too much television, or a problem with modern society" (Müller & Asherson, 2012, p. 2). Mental health professionals commonly believe that ADHD is more challenging to diagnose than other conditions, which impacts willingness to assess the condition (Asherson, 2005; Sibley, 2021; Weisler & Goodman, 2008). Beliefs that stimulant medication will lead to future addiction, doubts about the efficacy of medication, and concerns related to malingering are other reasons mental health professionals are hesitant to take on adult ADHD patients (French et al., 2019; Sciutto, 2013).

Lack of Training. Results from a recent study surveying 178 clinicians who purport to work with ADHD indicated that clinicians who regularly assess and diagnose ADHD (i.e., psychologists, including specialists in psychotherapy and neuropsychology; physicians, including neurologists; and occupational therapists) suggested that there is a significant lack of training. In fact, the majority of respondents (79.9%) in this study indicated only having had a "few hours" of ADHD specific training. Results also revealed disagreement among clinicians about the core features of ADHD, including a lack of consensus among clinicians about what symptoms are relevant to ADHD in adulthood. Findings suggested a general discrepancy between guideline recommendations and actual clinical practice, indicating more training may be needed to improve clinicians'

understanding of ADHD in adulthood (Schneider et al., 2019). Currently, limited research exists on the implementation of curricula about ADHD in adult psychopathology courses in graduate-level programs.

Treatment of ADHD

Successful treatment of adult ADHD is multi-dimensional and involves a combination of medication, behavioural strategies, and therapeutic interventions (Kooij et al., 2019; B. H. Smith et al., 2019). ADHD, like many other psychological disorders, is heterogenous, meaning that it varies from person to person and symptoms can range on a spectrum of severity (Luo et al., 2019). Treatment is often also heterogenous; medication types and doses will vary from person to person, and psychotherapy is often tailored to the client's individual needs (Dias et al., 2013; Greydanus et al., 2021; Harper & Gentile, 2022). It is thus essential that treatment is always followed by a health professional, such as a general practitioner, family doctor, or psychiatrist, if medication is involved (Sadock & Sadock, 2017), or a mental health professional, such as an ongoing psychologist or counsellor if behavioural interventions are being tried (Kooij et al., 2019).

Medication

Psychostimulants have been well-established through research as valuable tools in the management of ADHD (Castells et al., 2018; Castells et al., 2011; Fallu et al., 2016; Greydanus et al., 2021; Mészáros et al., 2009).

In adults, there have been several controlled clinical trials on the effectiveness of medication on treating ADHD. In 2009, Mészáros et al. looked at the effects of stimulant and non-stimulant medication versus placebos over a 4- to 10-week period, and found a medium-to-high effect size for all medications. A 2011 meta-analysis examining 18 studies showed that one stimulant medication (methylphenidate) moderately affected ADHD symptoms, with more significant effects observed at higher doses (Castells et al., 2011).

Other studies found reductions in criminality rates (Lichtenstein et al., 2012), serious transport accidents (Chang, Lichtenstein, D'Onofrio, et al., 2014), suicide rates (Chen et al., 2014), depression (Chang et al., 2016), and substance use (Chang, Lichtenstein, Halldner, et al., 2014) in individuals with ADHD treated with both stimulant and non-stimulant medication.

B. H. Smith et al. (2019) suggested that there is considerable evidence for the safety and effectiveness of ADHD medication in children and adolescents, but there is a gap in the literature on the outcomes of medication on adults with this condition.

Therefore, though there is robust support for the effectiveness of medications in treating traditional symptoms of ADHD, at least over a short duration, further studies are needed with adults to determine the safety, efficacy, and practicality of pharmacological treatment (B. H. Smith et al., 2019).

Despite its apparent benefits and effectiveness if appropriately taken, significant and various issues have been documented concerning using medication alone to treat ADHD (Greydanus et al., 2021; B. H. Smith et al., 2019). For example, not all patients with ADHD benefit from stimulants, there can be a variable response to one stimulant versus another, and side effects may make treatment adherence intolerable (Greydanus et al., 2021).

Additionally, medication alone does not provide individuals with the skills necessary for daily functioning. Behavioural interventions, when used in conjunction with stimulant medication, are considered to be significant in improving the treatment outcomes for individuals with ADHD (B. H. Smith et al., 2019)

Individuals with ADHD generally struggle with consistency and attending appointments, negatively impacting medication adherence (Sobanski et al., 2007; Swanson, 2003). In fact, medication adherence is positively impacted by providing psychoeducation and shorter follow-up periods after the first appointment (Semerci et al., 2016). For instance, results of one study showed individuals who received proper psychoeducation after their diagnosis and were followed up with shortly after were more likely to continue taking their medications as prescribed (Semerci et al., 2016).

Unfortunately, despite a consensus that best practice involves psychoeducation and behavioural treatment as primary steps in treating adult

ADHD (Kooij et al., 2019; B. H. Smith et al., 2019), studies show that ADHD patients can often feel abandoned by the healthcare system after receiving a diagnosis and prescription (Matheson et al., 2013). Among common concerns are difficulty accessing ADHD specialist care, receiving clear information from psychiatrists, symptom monitoring, receiving information on both short- and long-term medication effects, and unwillingness among health professionals to help adjust medication dosages and discuss potential risks (Aoki et al., 2020; Charach & Fernandez, 2013; Matheson et al., 2013; S. Young et al., 2009).

It should also be noted that ADHD medications only have minor to moderate effects on emotion dysregulation symptoms in adults with ADHD (Lenzi et al., 2018). Emotion dysregulation refers to deficits in effectively managing, controlling, or coping with emotions that interfere with goal-directed activity (Thompson, 2019). Emotion dysregulation is present in up to 70% of adults with ADHD (Lenzi et al., 2018) and is associated with significantly worse psychosocial outcomes, regardless of other comorbidities (M. Shaw et al., 2012). Some research indicates that emotion dysregulation mediates the relationship between ADHD and comorbidities, including anxiety symptoms, depression symptoms, friendship satisfaction, romantic satisfaction, and overall functional impairment (Bodalski et al., 2019).

Thus, individuals that rely solely on their medications to manage their ADHD symptoms without any behavioural or emotional support may be left with

an experience of failure and worsened comorbidities despite consistently using their medications. Though medication can be a life-changing support for many, the need for additional or alternate treatments is apparent.

Therapy

There is extensive evidence to support that therapy for ADHD symptoms can have transformative effects on the lives of adults with ADHD. Among the evidence-based therapies for ADHD, cognitive-behavioural therapy (CBT; Knouse, 2015; Solanto, 2011), dialectical behavioural therapy (DBT; Fleming et al., 2015; Hesslinger et al., 2002; Philipsen et al., 2007; Robins & Chapman, 2004), acceptance and commitment therapy (ACT; Fullen, Galab, et al., 2020; Munawar et al., 2021), and mindfulness training (Teasdale et al., 1995; Xue et al., 2019; Zylowska et al., 2008) are at the forefront of current research.

CBT utilizes cognitive and behavioural techniques to help an individual change their dysfunctional thought patterns and maladaptive actions and behaviours (Beck, 2016). CBT may help individuals understand their ADHD diagnosis and feel validated in their experiences (Bramham et al., 2009). Other elements of CBT that have shown utility for individuals with ADHD include affective differentiation (i.e., recognizing affective anxious states and related somatic reactions), cognitive restructuring (i.e., identifying and challenging negative thoughts and expectations), muscle relaxation, diaphragmic breathing, and relaxing imagery (Knouse, 2015; Solanto, 2011).

Mindfulness studies in adults with ADHD indicate that mindfulness training could significantly affect the neurobiological processes involved in attention regulation (Teasdale et al., 1995; Xue et al., 2019; Zylowska et al., 2008). Mindfulness has been defined as "the act of consciously focusing the mind on the present moment without judgment and without attachment to the moment . . . we can contrast mindfulness with automatic, habitual, or rote behaviour and activity" (Linehan, 2015, p. 151). There are several decades of research to support the usefulness of mindfulness-based techniques in improving adult ADHD symptoms. Teasdale et al. (1995) found that mindfulness improved self-regulation of attention and emotion. Zylowska et al. (2008) found improvements in attention and cognitive inhibition and anxiety and depressive symptoms after 8 weeks of mindfulness training. A recent meta-analysis featuring 11 studies and 682 participants found large effect sizes for mindfulness-based interventions in reducing core ADHD symptoms (Xue et al., 2019).

Dialectical behavioural therapy (DBT) was initially designed to treat individuals with BPD, suicidality, and parasuicide (Linehan et al., 1991). DBT is effective for treating BPD and has elements designed to provide life skills for coping with adversity, improve emotion regulation, and reduce impulsivity (Linehan et al., 1991). ADHD and BPD share some commonalities, including impulsivity and emotional dysregulation (Matthies & Phillipsen, 2014), implying that DBT can also be helpful for individuals with ADHD. Several pilot

randomized control trial studies conducted over the past 2 decades have shown that DBT skills groups were effective in reducing ADHD and comorbid symptoms and improving executive functioning, physical health, and overall quality of life (Fleming et al., 2015; Hesslinger et al., 2002; Philipsen et al., 2007). Moritz et al. (2021) also suggested that DBT can be used as an add-on treatment for ADHD to help improve specific symptoms such as emotional lability and inhibitory control.

Acceptance and commitment therapy (ACT), another third-wave cognitive behavioural approach, focuses on accepting distressing thoughts and feelings rather than eliminating or suppressing them (Harris, 2019). ACT aims to increase psychological flexibility, allowing individuals to cope with difficult thoughts and feelings more effectively while living by their values (Harris, 2019). In adults with ADHD, ACT has been found to help reduce the significant self-criticism and shame often accompanying ADHD (Luoma & Platt, 2015). ACT has also been found to help improve quality of life; decrease comorbid mental health symptoms; and reduce hyperactivity, impulsivity, and procrastination (Munawar et al., 2021).

Executive Functioning Coaching

Executive functioning coaching (i.e., ADHD coaching) is a targeted intervention designed to improve the cognitive processes responsible for planning, organizing, initiating, monitoring, and completing tasks in individuals with executive functioning deficits, particularly those with ADHD (Kubik, 2010).

Research has shown that executive functioning coaching can help teach time management, organization, and task initiation, leading to improved academic performance and increased self-efficacy, motivation, self-determination, and autonomy (Parker & Boutelle, 2009; Stamenova & Levine, 2019).

Additionally, individuals attending executive functioning coaching may receive training in inhibition and emotional control, allowing them to learn to manage stressful situations as well as to recognize and interrupt automatic responses such as intense anger or frustration and use self-regulation strategies instead (Center on the Developing Child at Harvard University, 2023). Because the severity of deficits in each area of executive functioning varies individually, strategies are typically customized to the individual. Executive functioning coaching may also include techniques from cognitive-behavioural therapy and mindfulness-based therapies, among others (Hepark et al., 2019; Mitchell et al., 2017; Solanto, 2011).

Various professionals, including licensed therapists, psychologists, educational coaches, school counsellors, and occupational therapists, may provide executive functioning coaching (Children and Adults with Attention-Deficit/Hyperactivity Disorder, 2015). Though some may be specially trained in executive functioning, others may incorporate executive functioning coaching into their treatment as part of a broader approach, such as psychotherapy (Prevatt & Levrini, 2015).

Barriers to Assessment and Treatment

The literature review thus far has highlighted the essential role that both specialized and general psychologists can play in supporting adults with ADHD through psychological evaluation and therapeutic interventions across the lifespan. Nevertheless, various barriers impede access to and implementation of these practices.

Waitlists

These barriers begin with receiving an assessment for ADHD. As per a recent Canadian Broadcasting Corporation (CBC) article, adults in British Columbia may have to wait between 1.5 and 2 years for an initial assessment at a public clinic specializing in ADHD. Private clinics offer faster assessments but can be costly and may still require several months to years of waiting (Gomez, 2022). In Prince Edward Island, an Eastern Canadian province, where access to psychologists is limited, a local clinic reported a waitlist of approximately 700 people for adult ADHD assessments in January 2023 (Brown, 2023). Growing waitlists are a country-wide problem (Brown, 2023).

Access to Medication

Once a diagnosis is received, other barriers emerge, including difficulty accessing and refilling medication. Stimulant medication (e.g., Vyvanse, Concerta, Adderall), considered the front-line treatment for ADHD, is classified as a Schedule II Controlled Substance in Canada (Canadian Centre on Substance

Use and Addiction, 2019). This category of drugs is defined as those with a high potential for abuse or addiction but with accepted medical uses with strict limitations on prescribing and dispensing (Preuss et al., 2019). Obtaining these medications necessitates a prescription from a licensed healthcare practitioner. In Canada, general practitioners often require a report from a psychiatrist, psychologist, or neurologist before providing a prescription, which can be both expensive and time-consuming, potentially taking several years to obtain.

Furthermore, even after successfully undergoing an assessment and receiving a diagnosis from a psychologist, individuals are still confronted with the obstacle of finding a doctor or psychiatrist who is willing to prescribe the necessary medication and well-informed about adult ADHD, as psychologists in Canada cannot currently prescribe medication. This challenge is compounded in rural regions of Canada, where access to healthcare is already limited. As mentioned, it is essential that the prescribing physician is knowledgeable in the diagnosis and can provide adequate psychoeducation and follow-up. Additionally, due to ADHD medication being classified as a Schedule II substance, numerous physicians are hesitant to grant refills, thereby hindering scheduling monthly appointments for a refill. This requires significant time, effort, and forethought, which can prove challenging for individuals with ADHD (Matheson et al., 2013).

Psychotropic Medication Side Effects

Some patients will not respond to pharmacological treatment even after navigating and overcoming all the barriers to obtaining medication. Others will experience intolerable side effects, such as sleep issues, irritability, loss of appetite, medical issues (e.g., increases in blood pressure and heart rate), personality changes, and suicidal ideation (Abikoff et al., 2007; Meijer et al., 2009; Rapport et al., 2002; Toomey et al., 2012). A recent study found that 95.2% of individuals on medication for ADHD experienced at least one side effect, with the most problematic including sleep-related problems, restlessness, loss of appetite, dry mouth, weight loss, emotion dysregulation, irritability, and depressed mood. These side effects were associated with reduced quality of life, employment, and increased impairment in work or daily activities (Schein et al., 2023). Side effects negatively impact adults' decisions to initiate, continue, or discontinue medication (Khan & Aslani, 2021). Despite these concerns, many individuals continue to take medication due to its benefits, the fear of life without it, and the lack of alternative options.

Psychotropic Medication Cost

Cost is another factor that can deter individuals from accessing medication for their ADHD (Khan & Aslani, 2021). In Canada, publicly funded healthcare does not cover ADHD medication, so individuals without insurance may have to bear the cost alone or take several measures to cover it. In Canada, drug prices are

considered the third highest among the Organisation for Economic Co-operation and Development (OECD) countries, about 25% above the OECD median (Government of Canada, 2023). The price of stimulants can range between $9.35 for prescription of Ritalin (methylphenidate) to $93.17 for Strattera (atomoxetine), with a mean price of $55.64 per prescription of extended- or short-acting formulation (Canadian Agency for Drugs and Technologies in Health, 2011). Although for low-income families these medications can be covered by insurance and health plans in various provinces in Canada, there are often barriers to obtaining this coverage, such as lengthy forms, applications, or additional doctor's notes (CADDRA, 2023). These added steps can be challenging to navigate, making affordable prescription medication hardly accessible to many individuals with ADHD, especially those with severe impairments in executive functioning who may benefit from the medication the most. The decision to reach out to a doctor or fill out initial assessment paperwork may already be challenging enough. Those who struggle to navigate this system adequately may need to pay out of pocket to quickly access medication instead of taking on an additional cognitive load.

Stigma

A significant barrier to treatment for ADHD is the presence of both real and perceived stigma around medication, which can come from patients, the public, and medical professionals. Unfortunately, despite the lack of current

evidence indicating significant long-term risks associated with stimulant medications for ADHD treatment (B. H. Smith et al., 2019), a prevailing skepticism persists about their effectiveness (Kooij et al., 2019). This skepticism fuels the apprehension regarding potential side effects and medication use, ultimately deterring individuals who suspect they have ADHD from seeking help and those already diagnosed from pursuing prescriptions and trying out medication. Furthermore, concerns about stimulant medication potentially leading to drug abuse can dissuade individuals from initiating treatment despite studies indicating that individuals treated with ADHD medication are less likely to develop subsequent drug and alcohol use disorders (Chang, Lichtenstein, Halldner, et al., 2014). Additionally, the stigma and shame associated with ADHD, particularly in adults, can be significant barriers to seeking treatment or disclosing one's condition to others, yet another reason for underdiagnosis (Mueller et al., 2012).

Overall, the stigmatization of ADHD medication can pose a significant risk factor for treatment adherence and efficacy, underscoring the importance of addressing and combating this issue (Mueller et al., 2012). Considering this, individuals diagnosed with ADHD must receive immediate and comprehensive psychoeducation on their diagnosis and treatment options (Hirvikoski et al., 2017). Moreover, any concerns or misconceptions they may have around their diagnosis must be addressed effectively to ensure they can access the care and

support they require, again highlighting the importance of practitioners being adequately educated and informed on adult ADHD.

Shortage of Health Professionals Working With ADHD

Because ADHD is underdiagnosed in adults, it is also undertreated. Although no Canadian-specific studies have been published thus far, this is a problem that has been recognized worldwide and over several decades (Barkley & Brown, 2008; Ginsberg et al., 2014; Kooij et al., 2019; Mattos et al., 2012). Limited resources, a shortage of skilled healthcare professionals who are knowledgeable, interested, and experienced in the treatment of adult ADHD, and financial barriers such as transport and consultation fees are significant obstacles that can hinder an individual's chances of receiving an accurate diagnosis (Schoeman et al., 2017). Specialized clinics are scarce and waitlists are long, limiting access to care, especially for individuals in remote areas. In Canada, while healthcare is publicly funded, free access to psychologists, counsellors, and specialized medication is limited to those with extended health benefits through their workplaces or paid plans.

The shortage of health professionals willing to work with adult ADHD can be attributed primarily to a lack of education and knowledge about the disorder. In a comprehensive meta-analysis conducted by French et al. (2019), 37 studies from various countries identified issues related to insufficient ADHD education among primary care physicians. More specifically, lack of initial training, inadequate

training, lack of awareness, insufficient experience, lack of understanding and knowledge concerning ADHD, and lack of confidence about ADHD and its treatment were identified as factors that affected the primary care experience of patients across areas of referral, diagnosis, and treatment (French et al., 2019). A qualitative study examining the experiences of 30 adults with ADHD in receiving service provision and clinical management for their ADHD revealed a disconcerting theme of doctors refusing medication due to negative attitudes toward ADHD medications, leading to significant distress and impaired patient functioning (Matheson et al., 2013).

The fear of malingering, where clients feign symptoms to obtain benefits, such as prescription medication, remains a concern among many practitioners that may hinder them from working with ADHD. The concern is especially high for ADHD. Studies have shown that, in college, malingering can occur in 12% to 47% of self-referred ADHD assessments (Harrison et al., 2010; Sullivan et al., 2007). College students may indeed have a high potential for malingering due to the perceived gains from receiving a diagnosis, such as extra time on exams or assignments, preferred seating, access to instructor notes, and a private test-taking room, on top of gains medication could provide. However, it is crucial to acknowledge that these studies have only been conducted with college-aged students. There is no known evidence for malingering in individuals beyond the college age to receive an ADHD diagnosis, which is a large and significant gap in

the literature (Sadek, 2022). Due to the widespread awareness of these studies among healthcare professionals and the gap in the literature regarding malingering practices in adults beyond the college age, it is inevitable that diagnosing and prescribing clinicians would steer clear of working with adult ADHD. This is therefore considered to be a significant factor for the shortage of healthcare professionals willing to work with ADHD.

Additionally, research has found that ADHD symptoms are often missed or mistaken for those of their comorbidities due not only to a poor understanding of ADHD, but also an absence of screening for adult ADHD when conducting general psychodiagnostic assessments (Kooij et al., 2010). Both factors contribute to missed diagnoses and misdiagnoses. Further, studies have indicated that treating comorbidities without addressing the underlying ADHD will typically lead to poor clinical and functional outcomes for clients (Ginsberg et al., 2014). However, when correctly identified, treatment can significantly improve ADHD symptoms, emotional lability, and client functioning, often leading to favourable outcomes (Ginsberg et al., 2014). Effective treatment has been found to lower the incidence of criminality, school drop-out, and substance abuse and reduce comorbid symptoms of anxiety and depression (British Columbia Medical Association, 2009; Zylowska et al., 2008).

Though a lack of evidence-based treatments may have posed a barrier to adult ADHD treatment in the past, recent years have spurred a significant increase

in studies exploring the effectiveness of non-pharmacological treatments for adults with ADHD (Fullen, Jones, et al., 2020). However, clinicians who are not up to date with the current literature may feel ill-prepared or lack the necessary tools to provide effective treatment, potentially hesitating to accept adult ADHD treatment referrals (French et al., 2019).

Furthermore, despite the considerable risks of missed diagnosis and undertreatment, debates among researchers regarding the disorder's validity and misconceptions surrounding overdiagnosis and medication usage can discourage individuals from seeking help and deter clinicians from assessing and treating ADHD (Katzman et al., 2016).

It is clear that greater access to information on ADHD, a stigma reduction, and well-educated healthcare practitioners are the primary pathway to breaking down these barriers. Researchers have recommended training healthcare practitioners to facilitate early detection and timely referrals. Ongoing access to medication management, psychoeducation, therapy, and support is also greatly needed (Schoeman et al., 2017).

Rationale and Hypotheses for the Current Study

The current literature review has highlighted the gaps in healthcare services as well as challenges faced by adults with ADHD in accessing mental health services specifically tailored to ADHD, including comprehensive assessments and appropriate therapeutic treatment. As mentioned, research has

indicated that this may be linked to misconceptions among mental health professionals and lack of training in this area (French et al., 2019; Sciutto, 2013). Nevertheless, there remains a gap in the literature concerning the practices of psychologists in diagnosing and treating adult ADHD despite their prominent role in diagnosing and treating other psychological disorders. Considering the significant consequences of leaving ADHD undiagnosed and undertreated, the role of psychologists in this area must be better understood.

The current study was thus designed to explore the provision of psychological care for adults with ADHD in Canada. This study had several objectives:

- Collect data on psychologists' previous training, assessment practices, treatment approaches, and beliefs related to adult ADHD to establish current trends in the field.
- Examine whether there is a correlation between psychologists' beliefs, their level of training, and the provision of psychological services for clients with ADHD.
- Determine the level of interest among psychologists in pursuing additional training related to assessing and treating adult ADHD.

To achieve these objectives, the current study addressed the following research questions:

1. What frequency of psychologists in Canada assess and treat adult ADHD?
2. What are psychologists' beliefs regarding adult ADHD?
3. Do psychologists' beliefs correlate with and influence their provision of psychological services (i.e., assessment and treatment) for adults with ADHD?
4. Do psychologists' current training levels correlate with and affect their provision of psychological services for adults with ADHD?
5. Is there a difference in strength of beliefs between participants who do and do not assess and treat ADHD in their practice?
6. Is there a difference in prior training levels between participants who do and do not assess and treat ADHD in their practice?
7. Is there a desire among psychologists for additional training in assessing and treating adults with ADHD?

Based on the literature, it was anticipated that a low proportion of psychologists would be assessing and treating adult ADHD compared to the overall population of psychologists. Further, it was anticipated that psychologists with higher levels of inaccurate beliefs about adult ADHD would report lower rates of acceptance of assessment and treatment referrals and engage less with specific strategies for treating the adult ADHD. Lastly, it was anticipated that psychologists who had higher levels of training in ADHD would express lower

levels of inaccurate beliefs and higher acceptance of assessment and treatment referrals.

Chapter II: Method

Ethics Approval

The study received ethical approval from Vancouver's Adler University Research Ethics Board (REB) on October 25, 2022. It was conducted in accordance with both the Tri-Council Policy Statement 2 (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2018) and Adler University policies (see Appendix B).

Research Design

The present study employed both an exploratory and correlational design to investigate the current trends in psychological service provision for adults with ADHD. This study also cross-sectionally compared the beliefs and prior training levels of participants who did and did not assess and treat adult ADHD in their practice. The objective was twofold—first, to provide a comprehensive description of the sample, and second, to examine the interplay among key variables, including psychologists' beliefs, training, treatment practices, and assessment practices. By exploring these relationships, the aim was to gain a deeper understanding of the factors that influence psychologists' provision of services to individuals with ADHD.

To gather data, the researcher developed a questionnaire specifically designed to address the research questions. The literature that supported the

development of this questionnaire was based on previous and similarly designed studies, described in the "survey" section below. Qualtrics, Version May 2020, an internet survey technology, was used to administer this survey, which featured a mix of multiple-choice and Likert-type questions, a standard practice in social science research (Croasmun & Ostrum, 2011). Respondents were presented with various question types, including forced-choice, select-all-that-apply, and multiple-choice questions permitting an "other" response. The questionnaire was written at a Grade 11 reading level, which the research team deemed appropriate for a sample of Canadian psychologists trained at either a master's or doctoral level.

In psychological research, survey design has frequently been employed to gather data on attitudes, beliefs, perceptions, and behaviours of the same individuals (Creswell, 2014). Internet survey technology was deemed the most cost-effective approach for this study to ensure efficient access to a diverse population, including those residing in rural areas (Simsek & Viega, 2001). The use of an online survey design aimed to provide participants with ample time and privacy to respond thoughtfully at a location of their choice. Additionally, the anonymous survey was deemed crucial for psychologists concerned about potential scrutiny of their practice (F. J. Fowler, 2013). By preserving anonymity, it was anticipated that participants would be more inclined to provide truthful responses, enhancing the measure's validity. Furthermore, it was expected that

most registered psychologists possess an active and valid email account and a level of comfort with internet usage.

Description of the Population

The target population for this study consisted of registered psychologists in Canada. According to Statistics Canada, there are a total of 19,570 registered psychologists in the country. Of this number, 18,010 psychologists actively practice within Canada, accounting for approximately 92% of the registered professionals (Statistics Canada, 2015).

Interestingly, the distribution of psychologists across the provinces in Canada shows some notable variations. Despite representing only 23.8% of Canada's total population, Quebec houses the majority of psychologists, accounting for 39.2% of registered professionals. In terms of the psychologist-to-population ratio, Canada as a whole has 95 psychologists per 100,000 people. However, there are variations across the provinces and territories. Nunavut has the lowest psychologist-to-population ratio at only 17 psychologists per 100,000 people. Following closely is Prince Edward Island, with a ratio of 22. The remaining provinces have ratios ranging from 36 to 54 psychologists per 100,000 people (Statistics Canada, 2015).

Inclusion and Exclusion Criteria

The inclusion criterion for this study consisted of individuals who were registered psychologists in Canada, ensuring that the sample was representative of the professional community.

Several exclusion criteria were employed to maintain the study's focus and validity. Individuals not currently practising and living in Canada were excluded, regardless of their registration status with their respective colleges. Additionally, individuals who did not self-identify as fluent in English (reading and writing) were excluded to ensure clear comprehension of the survey materials and accurate responses. These criteria were implemented to refine the participant pool and enhance the relevance and reliability of the study's findings.

Recruitment Procedures

Participants were recruited through both convenience recruitment and snowballing methods using a poster designed to advertise the study (see Appendix C). Convenience recruitment involves utilizing multiple avenues to reach potential participants. Firstly, the study poster was published on the CADDRA website (CADDRA, 2021) and shared on their LinkedIn page. Secondly, the researcher utilized email to contact private practices, clinics, and practitioners nationwide (see Appendix D). A mailing list was created, which included colleagues and publicly available emails listed on each province's psychological association's website. The researcher also applied to the Canadian Psychological

Association (CPA) Recruit Research Participants Portal (R2P2; see Appendix E), but no response was received. Therefore, it is unknown whether it was posted to their portal or if participants were reached through this avenue. Finally, the researcher shared the study poster on her social media (i.e., Facebook and LinkedIn) pages (see Appendix F), which was subsequently re-shared by colleagues and friends, potentially expanding the reach of the recruitment efforts. Snowball recruitment was also facilitated by encouraging participants to share the survey link with eligible colleagues via email. This approach allowed for the potential expansion of the participant pool through personal networks and professional connections (S. B. Fowler & Lapp, 2019; Norman & Russell, 2006). Overall, these recruitment strategies aimed to maximize the study's reach and ensure a diverse range of participants.

The survey was designed to take approximately 10–15 minutes for completion. The duration was determined through a combination of estimates provided by Qualtrics survey technology as well as thorough piloting by the researcher. The survey's recruitment period spanned just over 2 months, specifically from November 15, 2022, to January 30, 2023. To improve the response rate, repeated contact and reminders were sent to potential participants (Sheehan, 2001; see Appendix G).

Participation in the survey was voluntary, and no compensation was provided. However, participants were offered the opportunity to include their

email to receive the results of the study as well as the opportunity to contact the researcher about the results and any questions they may have had about the study. Contact information for participants was collected at the end of the survey for those interested.

To ensure data integrity, participant responses were only considered if they completed all the questions in the survey. Missing data and incomplete questionnaires were not included in the final data pool. The data were securely collected and stored on the Qualtrics server, which adheres to U.S. data privacy laws as a data controller, ensuring the protection and confidentiality of participants' information.

Confidentiality

To ensure participants' anonymity, no contact information was requested in the study. For those that did enter their email to receive updates on the study, their responses remained unlinked to their contact information. Moreover, participants were not obliged to disclose their age, gender, or ethnicity, further safeguarding their identities. According to the Qualtrics privacy policy, participants' IP addresses and location data were not collected. Specific Qualtrics technology was employed to prevent multiple responses and bot responses. All data collected on Qualtrics were then exported to a password-protected Excel file on the researcher's computer. An additional copy of the data was stored on a password-protected USB key, locked in a filing cabinet. In accordance with Adler

University's REB standards, the data will be kept for 5 years. Documents relating to data analysis and dissertation drafts will be held on the researcher's external hard drive, which is password protected. After 5 years, the raw data materials will be deleted.

Survey

Upon clicking the survey link, participants were directed to a landing page (see Appendix H) containing a brief study description. To ensure they met the inclusion criteria described earlier, participants were initially required to respond to three screening questions (see Appendix I). Participants who met the criteria then viewed an informed consent form (see Appendix J). After reviewing and providing consent, they were presented with the survey (see Appendix K), containing six sections, covering demographic information, employment history and prior training, beliefs about ADHD, practices in assessing and diagnosing adult ADHD (if applicable), practices in treating adult ADHD (if applicable), and training interests. The questionnaires were presented in a fixed order to minimize the potential for sequence effects. Some questions were conditionally displayed based on the participants' prior responses. All participants were presented with questions related to demographic information, employment history and prior training, beliefs about ADHD, and training interests. However, questions related to practices in treating adult ADHD were only presented to participants who indicated that they provided therapy. Likewise, questions related to practices in

assessing adult ADHD were only presented to participants who indicated that they provided assessments. A more detailed description and rationale for each section is provided below.

Demographic Information

The survey began with a demographic section, including age and gender. However, to maintain participant anonymity, no additional demographic data were collected, such as name, date of birth, contact information, or workplace name. This was done intentionally as it was not necessary for addressing the research questions and helped maintain the anonymity of participants.

Employment and Prior Training

This portion of the survey aimed to gather information related to participants' current and past employment status and their prior training. The questions covered various aspects, including the number of years practising as a clinical psychologist, province(s) of registration, specialized areas of clinical training, highest level of education completed, current and previous workplace settings, and practice settings (e.g., adults vs. children, therapy vs. assessment).

The survey questions in these sections were based on items from previous studies that explored psychological practices in different domains. For example, S. R. Smith et al. (2007) investigated psychologists' practices in providing assessment feedback to clients and identified factors such as "training and background, clinical experience, years of practice, work settings, and current

assessment practices" (p. 312) as relevant. Similarly, Jordan et al. (2009) examined school psychologists' roles, functions, challenges, and aspirations in Canada, highlighting information such as employment status, client groups, services, roles and functions, and supervision practices. Participants were also asked to indicate their highest level of education completed as the requirements for registration as a psychologist may vary by province, with some provinces requiring a master's degree and others requiring a doctoral degree.

Beliefs Relating to Adult ADHD

This section of the survey aimed to explore participants' beliefs about ADHD and how these beliefs may impact psychological practices across Canada. Previous research has indicated that misconceptions and stigma surrounding ADHD can create significant barriers to psychologists' willingness to work with individuals with the diagnosis (French et al., 2019; Sciutto, 2013). The questions in this section were developed by the researcher, drawing from studies that have identified specific beliefs, factors, and misconceptions that can contribute to differences in ADHD treatment (e.g., "ADHD is only a childhood disorder that does not persist into adulthood," "ADHD is overdiagnosed," "ADHD is caused by bad parenting," "stimulant therapy carries a significant risk for substance abuse," "ADHD is more prevalent in individuals with lower than average intelligence"; Faraone et al., 2004; French et al., 2019; Sciutto, 2013). Additionally, this section of the survey aimed to investigate how the belief that ADHD requires specialized

training impacts psychologists' willingness to assess and treat the disorder. Previous studies have found clinicians who believe working with ADHD requires specialized training are less likely to feel confident and competent in diagnosing and treating ADHD, less likely to work with clients with ADHD, and less likely to prescribe medication for ADHD (French et al., 2019; K. Shaw et al., 2003).

The section was presented in a Likert-type format, where participants could respond on a scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Likert-type scales have been widely used in psychology research and are considered reliable and valid for measuring beliefs, attitudes, and perceptions (Cohen & Swerdlik, 2017). Negatively-worded items were mostly avoided to enhance the measure's validity and minimize response bias (Chiavaroli, 2017; DeVellis, 2012; DiStefano & Motl, 2006). The measure was not validated by subject matter experts to determine optimality and a factor analysis was not performed due to limited resources. This is considered a limitation of the study and discussed further in the limitations section.

Practices in Assessing and Diagnosing Adult ADHD

The assessment and diagnostic practices of psychologists regarding adult ADHD were evaluated to determine the proportion of psychologists who accepted adult ADHD referrals. Research suggests that adult ADHD remains underdiagnosed potentially due to the diagnostic methods employed and the availability of psychologists to provide accurate diagnoses (Barkley & Brown,

2008; Ginsberg et al., 2014). Additionally, despite the existence of extensive literature outlining proper assessment guidelines for adult ADHD (Gallagher & Blader, 2001; Gibbins & Weiss, 2007; Kooij, 2012), studies indicate that only a minority of practitioners adhere to these guidelines (French et al., 2019). Furthermore, evidence suggests that many practitioners lack confidence in diagnosing adult ADHD, despite guidelines (French et al., 2019), further limiting access to diagnostic services for individuals seeking assessment.

Based on these findings, this section aimed to establish the frequency of psychologists who accepted adult ADHD assessment referrals and the extent to which they followed assessment protocols (e.g., diagnostic guidelines, assessment measures, feedback, and report practices). Additionally, psychologists who did not accept adult ADHD assessment referrals despite offering other types of assessments were asked to provide reasons for this decision. These data were also used to explore the relationship between practitioners' acceptance of assessment referrals and their beliefs about ADHD, as well as their current level of training on ADHD.

Practices in Treating Adult ADHD

This section aimed to gather information on whether psychologists in Canada accepted treatment referrals and provided treatment for adult clients with ADHD. Additionally, this section aimed to explore the methodologies employed by psychologists in their treatment approaches. Specific questions were included

to address various topics discussed during therapy with adult clients diagnosed with ADHD to gain insight into the most common presenting problems.

The literature review highlighted the effectiveness of several therapeutic techniques in targeting attention and executive functioning symptoms, improving emotion dysregulation, and addressing comorbid conditions such as anxiety and depression. Though numerous studies have explored medical treatments for ADHD in primary care settings, there are limited studies on the use of therapeutic techniques for ADHD beyond ACT, DBT, and CBT. This section of the questionnaire aimed to investigate other modalities participants used to treat adult ADHD. Understanding the range of treatment modalities participants utilized can help inform future studies and guide the development of evidence-based interventions for adult ADHD.

Training for ADHD

Studies have highlighted the lack of training and education as a significant barrier to providing comprehensive assessment and treatment for adults with ADHD, emphasizing the need for specialized training programs to address this issue (French et al., 2019; Schneider et al., 2019). This section of the questionnaire aimed to collect data on the current level of training among psychologists in Canada regarding adult ADHD and their interest in participating in future training programs. The objectives of this section were threefold:

- To determine the proportion of psychologists who felt adequately equipped to work with adults with ADHD.
- To explore the relationship between training levels and the acceptance of assessment and therapy referrals.
- To assess participants' interest in participating in or facilitating a training module on adult ADHD.

Closing Page

After the study, a closing page was presented to express gratitude to the participants for their involvement (see Appendix L). On this page, participants were given the option to provide their email addresses if they wished to receive a link to the final research paper. Additionally, the closing page included the contact details of the student researcher, enabling participants to reach out with any questions, concerns, or feedback regarding their participation in the research.

It is encouraging to note that the researcher received several emails from participants expressing enthusiasm for the study, interest in receiving the results, and providing general feedback on how the study could contribute to the field of psychology. This feedback from participants was valuable in understanding the impact and potential benefits of the research, and it highlighted the engagement and support of the Canadian psychological community in the study and the interest for this topic.

Risks and Benefits

Although psychologists are not typically considered a vulnerable population, the study considered the minimal risks involved, particularly addressing the potential stress or discomfort participants may have experienced if questions triggered feelings of incompetence or scrutiny toward their practice. To manage this risk, several measures were implemented to ensure participant well-being. First and foremost, participants were reassured that their involvement was entirely voluntary and they were free to withdraw from the study at any point without consequence. Additionally, the survey was designed to maintain participant anonymity, minimizing the risk of potential exposure. In the event of internet disconnection or premature link closure, data would not be lost, as the Qualtrics technology allowed participants to resume where they left off later, ensuring data integrity and continuity. It is important to note that participants' email addresses, if provided to receive study results, were kept separate from their survey responses to maintain confidentiality.

Participation in this study also offered numerous benefits to the participants. It allowed them to voice their opinions on the subject matter, advocate for their clients, and express their training needs in working with adult ADHD. By sharing their experiences and perspectives, participants contributed to advancing research in the field, ultimately benefiting the broader psychological community. Moreover, participants who provided their email addresses to receive

the completed study have the opportunity to deepen their understanding of working with adult ADHD by accessing the comprehensive results.

Statistical Analysis

Data analysis consisted of describing and analyzing the quantitative data using correlational analysis and descriptive statistics. Data were coded into an Excel file that was then analyzed using IBM SPSS Statistics software. Values were assigned for each question and coded into categories (i.e., nominal, ratio, descriptive). Most data were also assigned a numerical code for the purpose of analysis. The data were then entered into SPSS and checked for accuracy, completeness, and consistency. A descriptive statistical analysis and analyses using Mann-Whitney U test, Spearman's rank-order correlations, and post-hoc binomial logistic regressions were all conducted to address the research questions.

Spearman's Rank-Order Correlation

What factors correlate with participants' provision of psychological services (i.e., assessment and treatment) for adults with ADHD?

Spearman's rank-order correlations were run to examine the relationships between strength of beliefs and frequency of screening for ADHD in assessments. Spearman's correlation measures the strength and direction of association between two ranked variables.

Beliefs were quantified on a scale of 1 to 5 based on how strongly participants endorsed their beliefs, with 1 corresponding to *Strongly Disagree* and

5 corresponding to *Strongly Agree*. “Screening for ADHD” was quantified from 1 to 4, with 1 being *Never* and 4 being *Very Often*.

A Spearman’s rank-order correlation was used to examine the relationship between strength of beliefs and training level. Training levels were quantified as 0 = I have not received specialized training in this area, 1 = I have received training on ADHD but do not feel equipped to diagnose or treat ADHD, 2 = I have received training on ADHD and feel competent in working with ADHD, 3 = I consider myself an ADHD specialist, and 4 = I consider myself an ADHD specialist and I train other psychologists in this domain. “Other” was not quantified or included in this analysis.

A Spearman’s rank-order correlation was run to examine the relationship between frequency of screening for ADHD in assessment intake and prior training levels.

Mann-Whitney U Tests of Significance–Beliefs

Is there a difference in beliefs between participants who do and do not assess and treat ADHD in their practice?

Mann-Whitney U tests of significance were performed to determine whether there was a significant difference in strength of beliefs between participants who did and did not accept ADHD assessment and treatment referrals. The Mann-Whitney U test is a nonparametric test used to compare outcomes between two independent groups. In this case, the independent groups

were defined as participants who did and did not accept adult ADHD assessment and treatment referrals, and those that do not. The outcomes were defined as strength of beliefs.

Only the participants who indicated that they conducted either therapy or assessment in their practice were included in these analyses. Beliefs were quantified from 1 to 5, with 1 being the weakest level of endorsement of the belief (*strongly disagree*) and 5 being the strongest level of endorsement of the belief (*strongly agree*). The first analysis was conducted to identify if there was a significant difference in beliefs between participants who did and did not accept child ADHD assessment referrals. The second analysis was to identify if there was a difference in beliefs between participants who did and did not accept adult ADHD assessment referrals. The third analysis was conducted to identify if there was a significant difference in strength of beliefs between participants who did and did not accept adult ADHD therapy referrals. The fourth analysis was conducted to identify if there was a difference in beliefs between participants who did and did not specifically treat adult ADHD in their practice (e.g., worked therapeutically on treating symptoms of ADHD).

Mann-Whitney U Tests of Significance–Training Level

Is there a difference in training level between participants who do and do not assess and treat ADHD in their practice?”

A Mann-Whitney U test was performed to determine whether there was a significant difference in prior level of training between participants who did and did not accept adult ADHD assessment and treatment referrals. In this case, the independent groups were defined as participants who did and did not accept adult ADHD assessment and treatment referrals. The outcomes were defined as training level.

Only the participants who indicated that they conducted either therapy or assessment in their practice were included in this analysis. Participants who indicated "other" for current training practices were excluded from this analysis as their responses were considered qualitative in nature. Training levels were quantified as 0 = I have not received specialized training in this area, 1 = I have received training on ADHD but do not feel equipped to diagnose or treat ADHD, 2 = I have received training on ADHD and feel competent in working with ADHD, 3 = I consider myself an ADHD specialist, and 4 = I consider myself an ADHD specialist and I train other psychologists in this domain. "Other" was not quantified or included in this analysis.

Binomial Logistic Regressions

What factors influence participants' provision of psychological services (i.e., assessment and treatment) for adults with ADHD?

A binomial logistic regression was performed to ascertain the effects of beliefs and training on the likelihood that psychologists would accept assessment

and treatment referrals for adult ADHD. This analysis was considered appropriate for the current study as it is typically used to predict the probability of an observation falling into one of two categories of a dichotomous dependent variable (e.g., acceptance of ADHD assessment referrals, therapy referrals, and working with specific ADHD symptoms in therapy) based on continuous and categorical independent variables (e.g., beliefs and training).

Three separate regressions were run, with the predictor variables (i.e., participants' beliefs about ADHD as well as their current training levels) being stable throughout. All assumptions for the binomial logistic regression were met.

In each regression, beliefs and training were considered the independent variables. Beliefs were quantified as continuous variables, whereas training level was quantified as categorical variables ranked in the following order: 0 = I have not received specialized training in this area (deemed "least competent"), 1 = I have received training on ADHD but do not feel equipped to diagnose or treat ADHD, 2 = I have received training on ADHD and feel competent in working with ADHD, 3 = I consider myself an ADHD specialist, and 4 = I consider myself an ADHD specialist and I train other psychologists in this domain (deemed "most competent")/

All outcome variables (i.e., dependent variables) were binary variables with two possible values (i.e., "Yes" or "No," quantified as "0" and "1). The outcome variables were as follows, respectively:

- Regression 1: Acceptance of adult ADHD assessment referrals
- Regression 2: Acceptance of adult ADHD treatment referrals
- Regression 3: Provision of specific treatment for adult ADHD symptoms

Individuals who indicated an "other" response for training level were not included in this analysis, as their responses could not be categorized.

The first regression was run to determine if beliefs and training were significant predictors of acceptance of adult ADHD assessment referrals. The second regression run to determine if beliefs and training were significant predictors of acceptance of adult ADHD treatment referrals. The third regression run to determine if beliefs and training were significant predictors of providing specific treatment for adult ADHD symptoms.

Chapter III: Results

Although the study initially garnered 375 responses, not all answers were considered viable as some participants did not meet the study criteria, provided incomplete or inconsistent answers, or were flagged as duplicate responses, resulting in their exclusion from the analysis. Ultimately, a total of 231 responses were considered to meet criteria for use in the study.

Participant Demographics

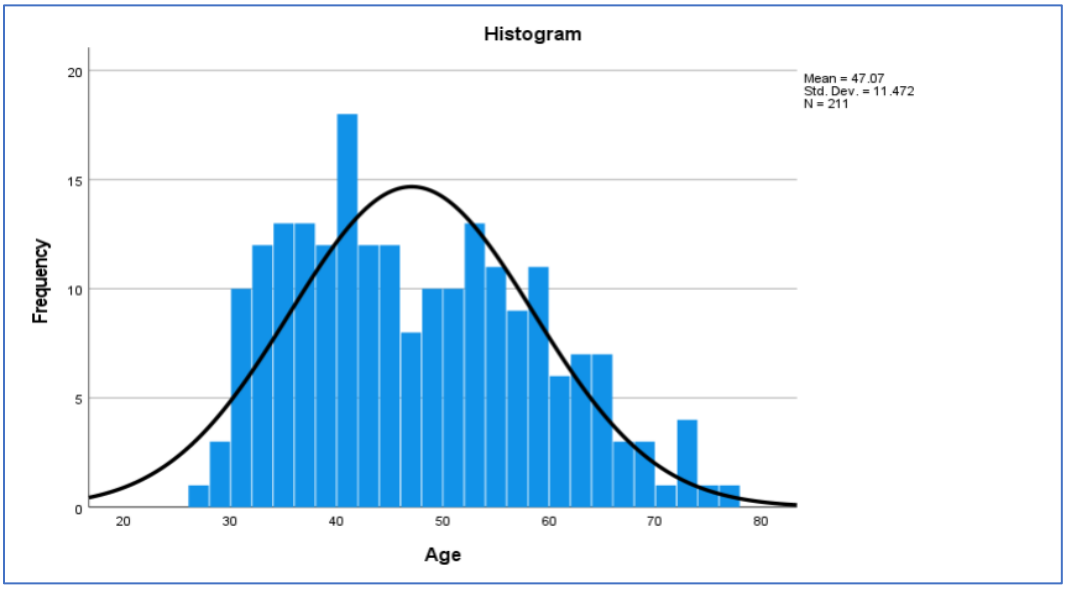
A total of 231 individuals were included in this study. All individuals identified as registered psychologists. Regarding gender distribution, most respondents identified as female (n = 182). Male respondents constituted 43 participants, three identified as non-binary, two as gender fluid, and one preferred not to indicate their gender. Regarding ethnicity, the largest proportion of participants (n = 202) self-identified as White or European. Nine respondents identified as mixed race, four as East Asian, four as Indigenous, four as Middle Eastern, three as Latino/Hispanic, one as Black/Afro-Caribbean/African Canadian, one as South Asian, and three preferred not to indicate their ethnicity. Gender distribution and ethnicity are depicted in Table 1.

Age distribution is depicted in Figure 1. Twenty participants opted not to indicate their age to protect their anonymity and were therefore not included in the mean age calculation. The average age of participants based on a sample size of 211 was 47.07 years (SD = 11.47). The mean age of the participants in this

study was 47 years old. The age range varied from 27 to 77 years, providing a diverse representation of different age groups.

Figure 1

Histogram for Age of Participants in Years



Note. Mean = 47.07 refers to the mean age of participants; Std. Dev. = standard deviation; *N* = 211 refers to portion of the sample that opted to include their age.

Table 1

Demographic Characteristics of Study Participants

Demographic characteristic	Total sample (N = 231)	
	n	%
Gender		
Female	182	78.0%
Male	43	18.6%
Non-binary	3	1.3%
Gender fluid	2	0.9%
Did not indicate	1	0.4%
Ethnicity		
White or European	202	87.5%
Mixed Race	9	3.9%
East Asian	4	1.7%
Indigenous	4	1.7%
Middle Eastern	4	1.7%
Latino or Hispanic	3	1.3%
Black, Afro-Caribbean, or African Canadian	1	0.4%
South Asian	1	0.4%
Did not indicate	4	1.3%

Note. N = total sample for this question; n = frequency of responses.

Employment and Prior Training

Information was collected on the number of years participants had been practicing as psychologists, provinces where they were currently registered as psychologists, in which areas of psychology they held specialized clinical training, the highest level of education that they had received, all settings in which they were currently working and had previously worked, which client population they worked with, and the distribution of their practice between therapy and

assessment. Response frequencies are depicted in Table 2 and notable findings are summarized below.

The study garnered fairly even responses regarding years practicing and level of education. Two hundred participants were registered in only one province (86.6%) and 31 participants (13.4%) were registered in more than one province. The study reached participants registered in all 10 provinces and three territories of Canada. Provinces with the highest numbers of participants included Nova Scotia, Ontario, Alberta, Quebec, Saskatchewan, Newfoundland and Labrador, and British Columbia. Provinces with the lowest number of participants included Northwest Territories, Nunavut, Yukon, and Prince Edward Island.

The majority of participants indicated that they currently worked in private practice. Private practice was also the most common prior workplace setting, with just over half endorsing that they had previously worked in private practice. The majority of participants noted that they primarily worked with adults (including young adults). Just under half of participants indicated that they provided both therapy and assessment but spent more time conducting therapy.

Table 2

Frequency of Employment and Training of Study Participants

	Total sample (N = 231)	
	n	%
Years practicing		
0–5	53	22.9%
5–10	52	22.5%
10–20	59	25.5%
20+	67	29%
Province of registration		
Alberta	33	14.3%
British Columbia	27	12.1%
Manitoba	18	7.8%
New Brunswick	15	6.5%
Newfoundland and Labrador	28	12.1%
Northwest Territories	3	1.3%
Nova Scotia	41	17.7%
Nunavut	3	1.3%
Ontario	40	17.3%
Prince Edward Island	2	0.9%
Quebec	29	12.6%
Saskatchewan	29	12.6%
Yukon	3	1.3%
Specialized areas of clinical training		
Clinical psychology	158	69.0%
Counselling psychology	73	31.9%
Forensic psychology	19	8.3%
Vocational psychology	4	1.7%
School psychology	67	29.3%
Clinical neuropsychology	19	8.3%
Health psychology	6	2.6%
Industrial/organizational psychology	1	0.4%
Other[a]	2	0.9%
Education		
Doctoral degree	135	58.4%
Master's degree	96	41.6%

	Total sample (N = 231)	
	n	%
Current workplace setting(s)		
Private practice	193	83.5%
School board	30	13.0%
Hospital	26	11.3%
Prison	4	1.7%
Residential treatment (e.g., group homes)	5	2.2%
Corporation	5	2.2%
University	23	10.0%
Community practice	20	8.7%
Other[b]	10	4.3%
Prior workplace setting(s)		
Private practice	120	51.9%
School board	64	27.7%
Hospital	99	42.9%
Prison	22	9.5%
Residential treatment (e.g., group homes)	24	10.4%
Corporation	11	4.8%
University	59	25.5%
Community practice	72	31.2%
Other[c]	19	8.2%
Client population		
I do not see clients anymore.	1	0.4%
I work primarily with adults (including groups, couples, and parents of children)	105	45.5%
I work primarily with children/youth.	32	13.9%
I work with both adults and children/youth	93	40.3%
Therapy & assessment practices		
I neither assess nor provide therapy.	4	1.7%
I only provide assessment.	25	10.8%
I only provide therapy.	35	15.2%
I provide both therapy and assessment but spend more time conducting assessments.	45	19.5%
I provide both therapy and assessment but spend more time conducting therapy.	92	39.8%
I split my time evenly between therapy and assessment	30	13%

Note. N = total sample for this question; n = frequency of responses.

[a] Two participants indicated other areas of training, including research and applied behaviour analysis (ABA).

[b] Ten participants indicated that they worked in an "other" setting, which included not-for-profit organizations, government jobs, shelters, a children's mental health agency for autism, a readaptation center, an operational stress injury clinic, a medical clinic, a youth detention center, and postsecondary education.

[c] Nineteen participants indicated that they had worked in another setting not previously mentioned, which included private schools, not-for-profit-organizations, shelters, non-hospital medical setting, addiction center for adolescents and families, private schools, private firms, forensic agency, community parole, or that they had never previously worked anywhere other than their current setting.

Practices in Assessing and Diagnosing Adult ADHD

Only participants who selected that they provided assessment (n = 192) viewed questions pertaining to the following section. Participants were asked about their practices in assessing and diagnosing adult ADHD, including how often they received referrals for adult ADHD, frequency of screening for ADHD in initial assessment intakes, frequency of accepting child ADHD assessment referrals, and frequency of accepting adult ADHD assessment referrals. The distribution of their responses is depicted in Table 3.

Table 3

Practices in Assessing and Diagnosing Adult ADHD

	Total sample (N = 192)	
	n	%
Frequency of adult ADHD Ax referrals received		
Never	6	3.1%
Sometimes	53	27.6%
Often	63	32.8%
Very often	70	36.5%
Frequency of screening for ADHD in initial Ax intakes		
Never	18	9.4%
Sometimes	42	21.9%
Often	61	31.8%
Very often	71	37.0%
Frequency of accepting child ADHD Ax referrals		
No	79	41.1%
Yes	113	58.9%
Frequency of accepting adult ADHD Ax referrals		
No	66	34.4%
Yes	126	65.6%

Note. N = total sample for this question; n = frequency of responses; Ax = assessments.

The 41 individuals who reported that they did not accept any child or adult ADHD assessment referrals were also asked to select all reasons that they did not accept ADHD assessment referrals in their practice. The responses are depicted in Table 4. The most common response was that they did not feel qualified.

Table 4

Reason for Not Accepting ADHD Referrals

	Total sample ($N = 41$)	
	n	%
I do not feel qualified.	24	58.5%
I worry about malingering to acquire stimulant medication.	1	2.4%
I do not have the time in my practice to conduct such a comprehensive assessment.	10	24.4%
This is not an area of interest for me, and I would prefer to refer these clients to my colleagues.	14	34.1%
Other[a]	13	31.7%

Note. *N* = total sample for this question; *n* = frequency of responses.

[a] Refers to participants who selected the "other" response. Reasons included that differential diagnosis with ADHD is too complex, that it is not supported by their employer, that they only work virtually and feel that they cannot administer all the tests they would use to assess ADHD, that it is out of their scope of practice, and that they do not screen for all diagnoses in their intake process.

Participants who did not accept adult ADHD referrals were asked to indicate their protocol(s) when they received an adult ADHD assessment referral. Their responses are depicted in Table 5. Forty-two (63.6%) participants noted that they would refer the client to another psychologist, and 23 (34.8%) participants noted that they would assess the client for comorbid conditions but refer them to another medical professional for a specialized ADHD assessment.

Table 5

Protocol When ADHD Assessment Referral is Received

	Total sample (N = 66)	
	n	%
I will refer the client to another psychologist.	42	63.6%
I will assess the client for comorbid conditions but will refer them to another medical professional for a specialized ADHD assessment.	23	34.8%
	19	28.8%
I will refer the client to a medical doctor.	12	18.2%
I will refer the client to a psychiatrist.	14	21.2%
Other [a]		

Note. N = total sample for this question; n = frequency of responses.

[a] Fourteen (21.2%) individuals selected an "other" response, with the majority indicating that they simply did not work with adults. One participant noted that they conducted neurocognitive and psychological tests to gather information on areas of strength and deficits to inform treatment and discharge planning. One participant noted that they did screen for ADHD, but only when in the context of an autism spectrum disorder (ASD) assessment.

One hundred and twenty-five participants indicated that they assessed for adult ADHD in their practice and were asked a series of questions about their assessment practices, including which diagnostic criteria they used (i.e., *DSM-5/DSM-5-TR* or ICD-11, and/or other), which assessment measures they used, how frequently they requested collateral information in their assessments, how frequently they provided a report following their assessments, and how much testing time they allotted to an adult ADHD assessment. These data are depicted

in Table 6. Results indicate that the majority of participants use the *DSM-5/DSM-5-TR* alone to diagnose ADHD.

This group of participants was also asked to select all assessment measures they typically used for adult ADHD assessment. Figure 2 depicts the number of assessment methods utilized by participants. Three participants (2.4%) reported using two measures, 45 (36.0%) participants reported using between three and five measures, and 77 (61.6%) reported using six measures or more.

Table 6

Assessment Procedures

	Sample (N = 125)	
	n	%
Diagnostic criteria used by participants for adult ADHD Ax		
DSM-5/*DSM-5-TR* only	112	89.6%
Both *DSM-5*/*DSM-5-TR* and ICD-11	7	5.6%
DSM-5/*DSM-5-TR* and other criteria	4	3.2%
Other criteria[a]	1	0.8%
Assessment measures for adult ADHD Ax		
Structured/Semi-structured interview	112	97.6%
Wechsler Adult Intelligence Scale (WAIS-IV)	82	65.6%
Conners' Adult ADHD Rating Scales (CAARS)	79	63.2%
Adult ADHD Self Report Scale (ASRS)	66	52.8%
Behaviour Rating Inventory of Executive Functioning (BRIEF)	62	49.6%
Conner's Continuous Performance Test	51	40.8%
Delis-Kaplan Executive Functioning System (D-KEFS)	38	30.4%
Brown Attention Deficit Disorder Scale (BADDS)	19	15.2%
NEPSY	9	7.2%
Other measures[b]	54	43.2%
Frequency of collateral information collected		

	Sample (N = 125)	
	n	%
Never	1	.8%
Sometimes	13	10.4%
Often	33	26.4%
Always	78	62.4%
Frequency of provision of Ax report		
Never[c]	2	.16%
Sometimes	6	4.8%
Often	21	16.8%
Always	96	76.8%
Frequency of provision of feedback		
Never	0	0.0%
Sometimes	0	0.0%
Often	4	3.2%
Always	121	96.8%
Length of time allotted to adult ADHD Ax		
Less than 1 hour	4	3.2%
1-2 hours	17	13.6%
2-4 hours	53	42.4%
More than 4 hours	51	40.8%
Proportion of clients seeking an ADHD Ax for the first time		
None of them	0	0.0%
Some of them	18	14.4%
Most of them	93	74.4%
All of them	14	11.2%

Note. N = total sample for this question; n = frequency of responses; Ax = assessments.

[a] One participant selected "other" but did not elaborate on their response.

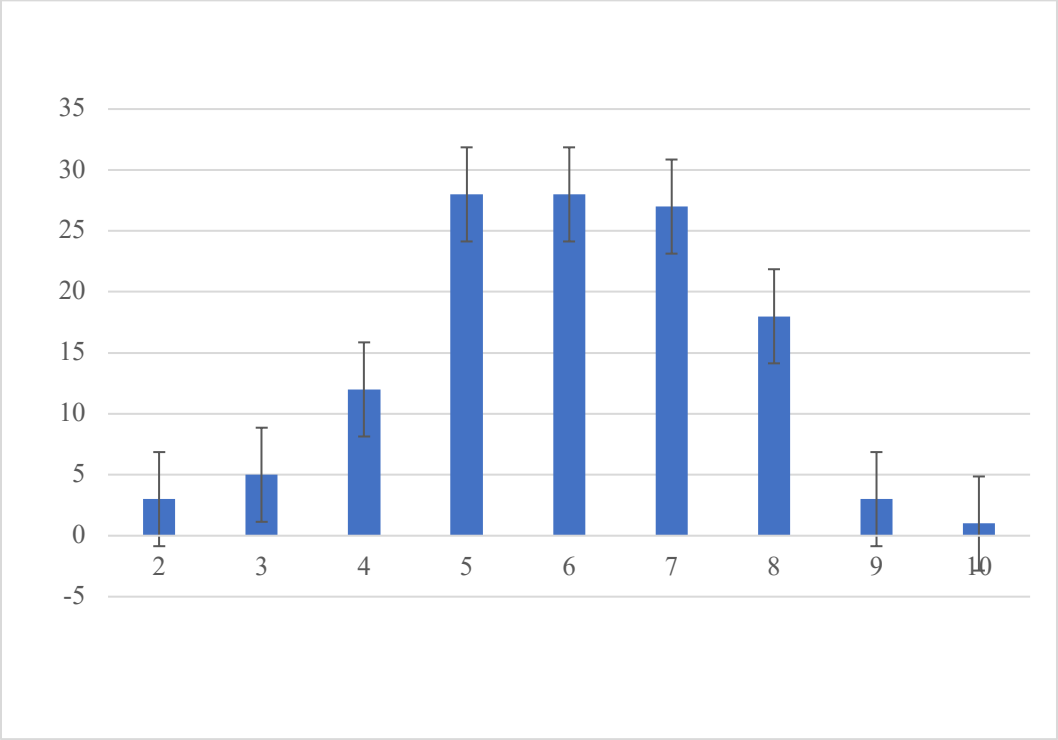
[b] Fifty-four individuals also selected other measures not included in the response selection. Out of these responses, common responses included BAARS-IV, Comprehensive Executive Function Inventory Adult (CEFI adult), IVA (a

comprehensive neuropsychological battery), collateral information, and screening for other comorbid or differential diagnoses.

[c] Two participants indicated that they never provided a report and were asked to elaborate; one indicated that they were not authorized to provide one due to their work setting, and the other indicated that they no longer wished to write lengthy reports and instead provided a short document indicating that they met criteria for the diagnosis.

Figure 2

Number of Assessment Measures Used to Diagnose Adult ADHD



Treatment Practices

Participants who selected that they provided therapy in their practice (*n* = 202) were asked if they accepted therapy referrals from adult clients with ADHD and if they specifically treated ADHD symptoms in therapy. Results are depicted in Tables 7 and 8. The majority of participants indicated that they did accept therapy referrals from adult clients with ADHD, with a majority of them indicating that they specifically treated adult ADHD in their practice (i.e., worked therapeutically on treating the symptoms of ADHD).

Table 7

Acceptance of Therapy Referrals

	Total sample (*N* = 202)	
	n	%
Yes	160	79.2%
No	42	20.8%

Note. *N* = total sample for this question; *n* = frequency of responses.

Table 8

Provision of Treatment for Specific ADHD Symptoms

	Total sample (*N* = 160)	
	n	%
Yes	109	68.1%
No	51	31.9%

Note. *N* = total sample for this question; *n* = frequency of responses.

The 51 participants who noted that they did not work therapeutically on treating symptoms of ADHD were asked to elaborate on the reason(s). The results are depicted in Table 9. Around half of participants noted the reason that they did not work therapeutically on treating symptoms of ADHD was that they did not feel competent.

Table 9

Reason for Not Working Therapeutically on Treating Symptoms of ADHD

	Total sample (N = 125)	
	n	%
I do not feel competent in treating adult ADHD symptoms specifically.	25	49.0%
I think that another clinician would be more suitable.	18	35.3%
I prefer to allot the therapy time to treating comorbid mental health issues, such as anxiety and depression.	18	35.3%
Other. [a]	16	31.4%

Note. N = total sample for this question; n = frequency of responses.

[a] Sixteen (31.4%) participants selected the "other" response, with reasons including that it was out of the scope of their practice, that their clients did not consult about those issues, that they focused on the clients' primary needs, or that they did not have the time.

Participants who indicated that they did not accept therapy referrals at all from adult clients with ADHD (n = 42) were asked to elaborate on the reason. The results are depicted in Table 10. Around half of participants indicated that they only worked with children. The second most common reason was listed as "This is not an area of interest for me, and I would prefer to refer these clients to my colleagues."

Table 10

Reason for Not Accepting Adult ADHD Therapy Referrals

	Total sample (N = 59)	
	n	%
I only work with children.	20	47.6%
This is not an area of interest for me, and I would prefer to refer these clients to my colleagues.	12	28.6%
I do not feel that I have the proper training to treat adult ADHD.	10	23.8%
I think that another clinician would be more suitable.	11	26.2%
Other[a]	6	14.3%

Note. N = total sample for this question; n = frequency of responses.

[a] Six respondents selected "other", indicating the following responses:

- "I mainly see children and feel much less informed and confident in my treatment of adults with ADHD."
- "I primarily work with children and adolescents so if I were to accept a referral from a young adult, their difficulties would have to be related to their post-secondary, educational pursuits."

- “The focus of my position is assessment.”
- “I only do adult assessments in my part time private practice . . . I do not have the capacity to do therapy in my private practice.”
- “I do accept referrals of clients who say they have ADHD, but I am not an expert in ADHD and make this clear.”
- “I primarily do assessment rather than therapy.”

Participants who indicated that they accepted adult ADHD therapy referrals but did not work specifically on treating ADHD symptoms were asked their protocol(s) when they received an adult ADHD treatment referral. Results are depicted in Table 11. The majority of participants noted that their protocol would be to refer the client to another colleague for therapeutic treatment.

Table 11

Protocols When an ADHD Treatment Referral is Received

	Total sample ($N = 44$)	
	n	%
I will refer the client to another colleague for therapeutic treatment.	37	84.1%
I will refer the client to their primary care physician for medical treatment.	21	47.7%
I will refer the client to an executive functioning coach for skills training.	7	15.9%
I will take the referral and refer them to a doctor or psychiatrist for medication management for their ADHD symptoms.	7	15.9%
I will take the referral and consult with another colleague on specific treatment for ADHD.	4	9.1%
Other[a]	2	4.5%

Note. N = total sample for this question; n = frequency of responses.

[a] Two (4.5%) participants selected "other" but did not elaborate further.

Treatment Practices With Adult ADHD Clients

Participants who indicated that they did accept adult ADHD therapy referrals ($n = 160$) were asked a series of questions, including to check off their current practices in treating adult ADHD; what additional supports, if any, they implemented for their adult ADHD clients; and what modalities they used to treat their adult clients with ADHD. Their responses are depicted in Table 12. Just over half of participants noted that they provided treatment for mental health symptoms and provided executive functioning coaching. The most common additional supports provided included appointment reminders and flexibility on

late cancels or no-shows. The most commonly reported modality for working with adult ADHD was CBT.

Table 12

Practices for Treating Adult ADHD

	Total sample (N = 160)	
Treatment practices	*n*	%
Current practices		
I provide treatment for mental health symptoms and provide executive functioning coaching.	107	66.9%
I prioritize treating mental health symptoms and refer them elsewhere for executive functioning coaching.	28	17.5%
I only treat mental health symptoms.	12	7.5%
Other [a]	13	8.1%
Additional supports [b]		
Phone check-ins	18	11.3%
Appointment reminders	126	78.8%
Flexibility on late cancels and/or no-shows	87	54.4%
None	18	11.3%
Other	26	16.3%
Modalities [c]		
CBT	91	58.9%
ACT	27	16.9%
DBT	10	6.3%
Mindfulness	19	11.9%
Psychodynamic	4	2.5%
Integrative/Eclectic	17	10.6%
Emotion Focused Therapy	3	1.9%
Other [d]	63	39.4%

Note. N = total sample for this question; n = frequency of responses.

[a] Twenty-six (16.3%) participants indicated that they provided other additional supports not listed in the initial question. Their responses included increased flexibility and availability in therapy, helping clients add appointments into their

calendar while in the therapy office, emailing clients their homework after sessions, developing concrete steps to follow, catering homework and treatment for each client, accommodations in therapy-related assignments, written session recaps and take-aways, switching to remote sessions as needed (e.g., if the client is late or forgets they have a session), checking in with clients via email or text between sessions, providing clients with an online coaching community that they could access, connecting clients with other service providers, reduction in therapy homework, and providing supplemental resources such as workbooks and applications.

[b] Participants were instructed to select all that apply, resulting in multiple responses generated for some participants.

[c] This was an open-ended question, and although many different modalities were listed, results were amalgamated into eight categories: cognitive-behavioural therapy (CBT), acceptance and commitment therapy (ACT), dialectical behavioural therapy (DBT), mindfulness, psychodynamic, integrative/eclectic, emotion focused, and other. Multiple responses were generated for some participants.

[d] Among the 63 "other" responses were narrative therapy, motivational interviewing, behavioural strategies, holistic/person centred, internal family systems, humanistic, EMDR, and lifestyle counselling (e.g., focus on diet and exercise).

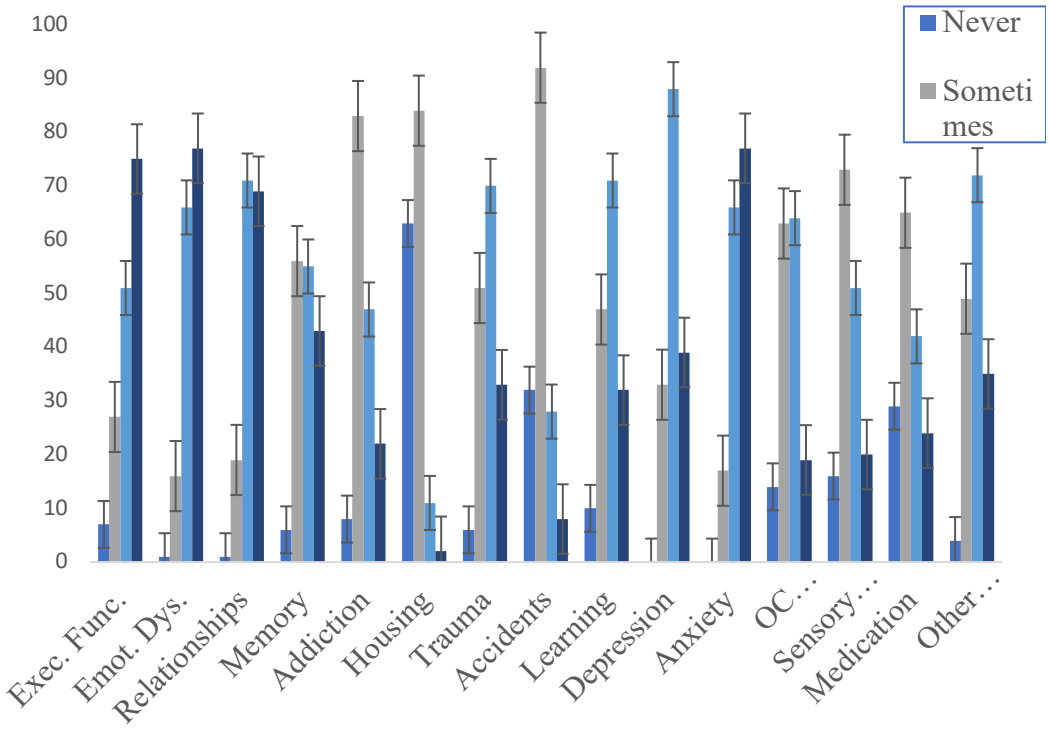
Topics in Therapy

This group of participants were also asked, on a 4-point Likert scale, how often they discussed or worked with the following issues: executive functioning skills, emotion dysregulation, relationships, memory, addiction, housing, trauma, accidents, learning, depression, anxiety, obsessive compulsive symptoms, sensory issues, medication management, and other diagnoses. Response options included 1 (*Never*), 2 (*Sometimes*), 3 (*Often*), and 4 (*Very Often*). Figure 3 displays the frequency of responses for each participant.

Topics that trended toward being endorsed often or very often included executive functioning, emotion dysregulation, relationships, depression, and anxiety. The medians for each response are depicted in Table 13. Topics endorsed "often" (i.e., had medians of 3) included executive functioning, emotional dysregulation, relationships, memory, trauma, learning issues, and obsessive-compulsive symptoms.

Figure 3

Frequencies for Topics Discussed in Therapy



Note. Exec. Func = executive functioning. Emot. Dys. = emotional dysregulation. OC = obsessive-compulsive.

Table 13

Statistics for Topics Discussed in Therapy

	Total sample (N = 160)	
Topics discussed	Median	Range
Executive functioning	3	1-4
Emotion dysregulation	3	1-4
Relationships	3	1-4
Memory	3	1-4
Addiction	2	1-4
Housing	2	1-4
Trauma	3	1-4
Accidents/Injuries	2	1-4
Learning issues	3	1-4
Depression	3	1-4
Anxiety	3	1-4
Obsessive compulsive symptoms	3	1-4
Sensory sensitivities	2	1-4
Medication management	2	1-4
Other diagnoses	2	1-4

Note. N = total sample for this question. 1 = Strongly Disagree, 2 = Slightly Disagree, 3 = Neither Agree nor Disagree, 4 = Slightly Agree, 5 = Strongly Agree.

Protocols From Participants Who Did Not Conduct Assessment

Participants who indicated that they did not conduct any assessments in their practice (i.e., they only practiced therapy) were asked about their protocol(s) when they suspected one of their adult clients may have undiagnosed ADHD. Results are depicted in Table 14. Most participants reported that they would either inform them of their suspicions and suggest a formal assessment, or provide them with questionnaires to do an informal assessment.

Table 14

Protocol(s) From Participants Who Did Not Conduct Assessment

	Total sample (N = 35)	
	n	%
Inform them of your suspicions and suggest a formal assessment.	28	80%
Provide them with therapeutic techniques for their ADHD symptoms.	23	65.7%
Provide them with questionnaires to do an informal assessment.	25	71.4%
Other [a]	3	8.6%

Note. N = total sample for this question; n = frequency of responses.

[a] Three (8.6%) participants indicated another course of action: one did not elaborate, one noted that they would ask clients to speak to their general practitioner to request an assessment, and one noted that they would work on neuro-affirming strategies to help them accept their status as "neurodivergent" (not working directly on symptoms) and create accommodations to live with ADHD.

Beliefs About ADHD

All participants in the study (N = 231) answered 23 questions relating to their beliefs about ADHD. Participants were asked to rate their belief relating to each question in Likert-type format on a 5-point scale (1 = *strongly disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree*, 5 = *strongly agree*). Medians were calculated for this section and are depicted in Table 15.

Table 15

Beliefs Relating to ADHD

	Question	Total sample ($N = 231$) Median	Range
1	ADHD is a disorder that only affects children	1	1–5
2	A combination of medication and psychotherapy is the most effective treatment for ADHD	5	1–5
3	ADHD is overdiagnosed	3	1–5
4	ADHD is a behavioural problem	2	1–5
5	It is difficult to treat individuals with ADHD	2	1–5
6	ADHD is a disorder that persists into adulthood	5	1–5
7	Emotion dysregulation is a core feature of ADHD	4	1–5
8	Most adults seeking assessment for ADHD are malingering to receive stimulant medication	1	1–5
9	ADHD results from parents being inconsistent with rules and consequences	1	1–5
10	Stimulant therapy for ADHD creates a risk for later substance abuse	1	1–5
11	It is more difficult to diagnose ADHD than other psychological disorder	2	1–5
12	Dietary changes can treat ADHD symptoms	2	1–5
13	Stimulant medications do not benefit adults with ADHD	1	1–5
14	ADHD does not occur in individuals with higher-than-average intelligence	1	1–5
15	Children diagnosed with ADHD can continue to be impaired by the disorder in adulthood	5	1–5
16	ADHD often co-occurs with other psychological disorders	5	1–5
17	The presence of another psychological disorder rules out a diagnosis of ADHD	1	1–5
18	ADHD is a hereditary condition	4	1–5
19	ADHD is not a real disorder	1	1–5
20	ADHD only affects males	1	1–5
21	ADHD should be assessed and treated by individuals with specialized training in this area of psychology	5	1–5
22	ADHD is caused by an attachment disorder	1	1–5
23	ADHD is a neurological disorder	5	1–5

Note. *N* = total sample for this question. 1 = Strongly Disagree, 2 = Slightly Disagree, 3 = Neither Agree nor Disagree, 4 = Slightly Agree, 5 = Strongly Agree.

On average, beliefs that had the highest medians (suggesting stronger endorsement) included Belief 2 (A combination of medication and psychotherapy is the most effective treatment for ADHD), Belief 6 (ADHD is a disorder that persists into adulthood), Belief 15 (Children diagnosed with ADHD can continue to be impaired by the disorder in adulthood), Belief 16 (ADHD often co-occurs with other psychological disorders), Belief 18 (ADHD is a hereditary condition), Belief 21 (ADHD should be assessed and treated by individuals with specialized training in this area of psychology), and Belief 23 (ADHD is a neurological disorder). The one belief where the median fell in the middle was Belief 3 (ADHD is overdiagnosed).

Figure 4 portrays frequencies for each belief. The majority of participants strongly disagreed with Belief 1 (ADHD is a disorder that only affects children; *n* = 218), Belief 8 (Most adults seeking assessment for ADHD are malingering to receive stimulant medication; *n* = 159), Belief 9 (ADHD results from parents being inconsistent with rules and consequences; *n* = 190), Belief 13 (Stimulant medications do not benefit adults with ADHD; *n* = 157), Belief 14 (ADHD does not occur in individuals with higher-than-average intelligence; *n* = 215), Belief 17 (The presence of another psychological disorder rules out a diagnosis of ADHD; *n*

= 180), Belief 19 (ADHD is not a real disorder; *n* = 218), Belief 20 (ADHD only affects males; *n* = 223), and Belief 22 (ADHD is caused by an attachment disorder; *n* = 170).

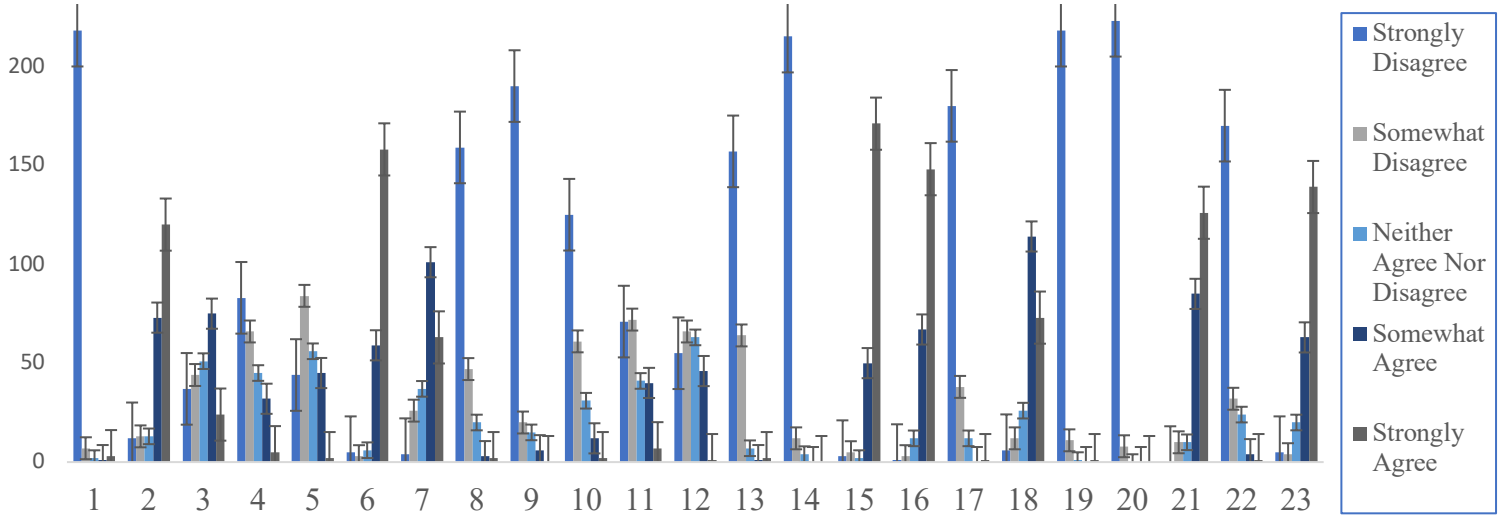
Just over half of the participants (*n* = 120) strongly agreed with Belief 2 (A combination of medication and psychotherapy is the most effective treatment for ADHD). Just over half (*n* = 125) of the participants strongly disagreed with Belief 10 (Stimulant therapy for ADHD creates a risk for later substance abuse).

The majority of participants strongly agreed with Belief 7 (Emotion dysregulation is a core feature of ADHD; *n* = 158), Belief 15 (Children diagnosed with ADHD can continue to be impaired by the disorder in adulthood; *n* = 171), Belief 16 (ADHD often co-occurs with other psychological disorders; *n* = 148), and Belief 23 (ADHD is a neurological disorder; *n* = 139).

Beliefs that generated a more even distribution of responses included Belief 3 (ADHD is over-diagnosed), Belief 4 (ADHD is a behavioural problem), Belief 5 (It is difficult to treat individuals with ADHD, Belief 11 (It is more difficult to diagnose ADHD than other psychological disorders), and Belief 12 (Dietary changes can treat ADHD symptoms).

Figure 4

Frequency of Endorsement of Each Belief



Note. Refer to Table 15 for a description of each belief.

Correlational Analysis

There were significant negative correlations between screening for ADHD in the initial intake and Belief 5 (It is difficult to treat individuals with ADHD), Belief 11 (It is more difficult to diagnose ADHD than other psychological disorders), and Belief 19 (ADHD is not a real disorder). There was a significant positive correlation between Belief 18 (ADHD is a hereditary condition) and screening for ADHD in the initial intake. Table 16 portrays the results.

Note that though significant correlations between individual beliefs are displayed in Table 16, they are not described in detail here as they are not relevant to the research questions.

Table 16

Spearman Correlation Between Beliefs and Assessment Items/Treatment Practices Options

Belief	*n*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Belief 1	231	1.11	0.55	-	-0.12	0.12	.13*	0.04	.23**	-0.01	0.12	.19**	.17**	0.10	0.09
2. Belief 2	231	4.19	1.11	-0.12	-	-.13*	-0.08	-0.04	0.11	0.12	-0.08	-.13*	-.15*	-0.12	-.15*
3. Belief 3	231	3.02	1.26	0.12	.13*	-	0.09	.19**	.19**	0.09	.27**	0.13	.22**	.13*	0.02
4. Belief 4	231	2.18	1.13	.13*	0.08	0.09	-	0.12	-0.03	0.01	.18**	.15*	.23**	.18**	0.13
5. Belief 5	231	2.47	1.04	0.04	0.04	.19**	0.12	-	0.07	0.03	0.10	0.11	.23**	.28**	0.06
6. Belief 6	231	4.57	0.80	-.23**	0.11	-.19**	0.03	-0.07	-	.26**	-.15*	-.21**	-0.10	-.15*	-0.05
7. Belief 7	231	3.84	1.01	0.01	0.12	-0.09	-0.01	-0.03	.26**	-	-0.04	-0.10	-0.05	-0.03	-0.01
8. Belief 8	231	1.45	0.78	0.12	0.08	.27**	.18**	0.10	.15*	0.04	-	.18**	.29**	.19**	.25**
9. Belief 9	231	1.29	0.05	.19**	.13*	0.13	.15*	0.11	.21**	0.10	.18**	-	.35**	.18**	.18**
10. Belief 10	231	1.72	0.94	.17**	.15*	.22**	.23**	.23**	0.10	0.05	.29**	.35**	-	.26**	.22**

Belief	*n*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
11. Belief 11	231	2.31	1.17	0.10	0.12	.13*	.18**	.26**	.15*	0.03	.19**	.18**	.26**	-	.18**
12. Belief 12	231	2.45	1.07	0.09	.15*	0.02	0.13	0.06	0.05	0.01	.25**	.18**	.22**	.18**	-
13. Belief 13	231	1.39	0.66	.36**	.24**	.29**	0.07	.17**	.13*	0.06	.15*	.20**	.28**	0.12	.21**
14. Belief 14	231	1.09	0.34	.15*	.15*	0.07	.17**	0.12	.18**	0.13	.19**	.22**	0.11	.16*	-0.01
15. Belief 15	231	4.65	0.73	-.26**	.23**	-0.10	-0.04	0.00	.37**	0.09	-.20**	-.18**	-0.12	-0.11	-.22**
16. Belief 16	231	4.55	0.67	-.13*	.15*	-.14*	-0.07	0.02	.17*	.26**	-.21**	-0.08	-.15*	-0.07	-.16*
17. Belief 17	231	1.29	0.60	.23**	0.12	.19**	0.11	0.10	0.3*	0.11	.31**	.28**	.16*	.19**	0.13
18. Belief 18	231	4.02	0.94	-.13*	.29**	-.31**	-.18**	-.15*	.16*	.27**	0.01	-.16*	-.29**	-0.11	-0.12
19. Belief 19	231	1.07	0.36	.18**	0.08	0.06	.23**	0.12	.22**	0.07	.16*	.33**	.20**	.14*	0.11
20. Belief 20	231	1.03	0.18	0.05	0.09	0.05	.17**	0.11	0.11	0.11	.19**	.27**	0.10	0.03	0.08
21. Belief 21	231	4.42	0.77	0.03	-0.10	0.01	0.03	-0.01	-.13*	-0.09	-0.05	-0.01	-0.08	-0.02	-0.11
22. Belief 22	231	1.42	0.78	.17**	0.10	0.08	0.07	.16*	0.05	-0.03	0.02	.43**	.32**	.15*	.22**

Belief	*n*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
23. Belief 23	231	4.42	0.89	-.20**	.21**	-.16*	-0.11	-0.06	.16*	.15*	0.02	-.16*	-.16*	0.00	-0.04
24. Screen for ADHD [a]	192	2.96	0.98	-0.04	0.09	-0.12	0.00	-.23**	0.04	-0.02	-0.08	-0.08	-0.11	-.24**	-0.05
25. Previous training [b]	218	1.93	1.02	-0.08	0.13*	-0.19**	-0.07	-.23**	0.11	-0.01	-0.04	-0.13	-.23**	-.21**	-.15*

Note. Reference Table 15 for a description of each belief.

[a] Participants were asked how frequently they screen for adult ADHD in their assessment intakes.

[b] Participants were asked to indicate their level of current training in ADHD.

* $p < .05$. ** $p < .01$.

Variable	*n*	*M*	*SD*	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Belief 1	231	1.11	0.55	.36**	.15*	.26**	.13*	.23**	.13*	.18**	0.05	0.03	.17**	.20**	-0.04	-0.08
2. Belief 2	231	1.81	1.11	.24**	-.15*	.23**	.15*	-0.12	.29**	-0.08	-0.09	0.10	-0.10	.21**	0.09	0.13*
3. Belief 3	231	3.02	1.26	.29**	0.07	0.10	.14*	.19**	.31**	0.06	0.05	0.01	0.08	.16*	-0.12	-.19**
4. Belief 4	231	2.18	1.13	0.07	.17**	0.04	0.07	0.11	.17**	.23**	.17**	0.03	0.07	0.11	0.00	-0.07
5. Belief 5	231	2.47	1.04	.17**	0.12	0.00	-0.02	0.10	.14*	0.12	0.11	-0.01	.16*	0.06	-.23**	-.23**
6. Belief 6	231	1.43	0.80	-.13*	-.18**	.37**	.17*	-.28**	.16*	-.22**	-0.11	.13*	-0.05	.16*	0.04	0.11
7. Belief 7	231	2.16	1.01	-0.06	-0.13	0.09	.26**	-0.11	.27**	-0.07	-0.11	0.09	0.03	.15*	-0.02	-0.01
8. Belief 8	231	1.45	0.78	.15*	.19**	.20**	.21**	.31**	0.00	.16*	.19**	-0.05	0.02	-0.02	-0.08	-0.04
9. Belief 9	231	1.29	0.05	.20**	.22**	.18**	0.08	.28**	.16*	.33**	.27**	-0.01	.43**	.16*	-0.08	-0.13
10. Belief 10	231	1.72	0.94	.28**	0.11	0.12	.15*	.16*	.29**	.20**	0.10	-0.08	.32**	.16*	-0.11	-.23**
11. Belief 11	231	2.31	1.17	0.12	.16*	0.11	0.07	.19**	0.11	.14*	0.03	-0.02	.15*	0.00	-.24**	-.21**
12. Belief 12	231	2.45	1.07	.21**	-0.01	.22**	.16*	0.13	0.12	0.11	0.08	-0.11	.22**	0.04	-0.05	-.15*
13. Belief 13	231	1.39	0.66	-	.17**	.35**	.27**	.27**	.26**	.18**	0.11	-0.01	.21**	.16*	-0.12	-.23**
14. Belief 14	231	1.09	0.34	.17**	-	.26**	.18**	.21**	.24**	.29**	.32**	-.15*	0.13	.15*	-0.06	-.16*
15. Belief 15	231	1.35	0.73	-.35**	-.26**	-	.36**	-.33**	.14*	-0.12	-0.11	.13*	-.19**	0.07	.16*	.14*
16. Belief 16	231	1.45	0.67	-.27**	-.18**	.36**	-	-.31**	.23**	-.18**	-.17**	0.07	-0.11	0.11	0.11	0.08
17. Belief 17	231	1.29	0.60	.27**	.21**	.33**	.31**	-	0.10	.31**	.29**	-0.06	.14*	0.00	-0.13	-0.08
18. Belief 18	231	1.98	0.94	-.26**	-.24**	.14*	.23**	-0.10	-	-0.06	-0.09	.13*	-.20**	.34**	.19*	.31**
19. Belief 19	231	1.07	0.36	.18**	.29**	0.12	.18**	.31**	0.06	-	.57**	-0.12	.26**	.26**	-.15*	-0.11

Variable	*n*	*M*	*SD*	13	14	15	16	17	18	19	20	21	22	23	24	25
20. Belief 20	231	1.03	0.18	0.11	.32**	0.11	.18**	.29**	0.09	.57**	-	-.15*	.26**	.21**	-0.07	-0.02
21. Belief 21	231	4.42	0.77	-0.01	-.15*	-.13*	-0.07	-0.06	-.13*	-0.12	-.15*	-	-0.08	-0.12	0.08	0.01
22. Belief 22	231	1.42	0.78	.21**	0.13	.19**	0.11	.14*	.20**	.26**	.26**	-0.08	-	.30**	-0.13	-.20**
23. Belief 23	231	1.58	0.89	-.16*	-.15*	0.07	0.11	0.00	.34**	-.26**	-.21**	0.12	-.30**	-	0.04	.21**
24. Screen for ADHD (Yes/No)	192	2.96	0.98	-0.12	-0.06	.16*	0.11	-0.13	.19*	-.15*	-0.07	0.08	-0.13	0.04	-	0.49**
25. Current training	218	1.93	1.02	-.23**	-.16*	.14*	0.08	-0.08	.31**	-0.11	-0.02	0.01	-.20**	.21**	0.49**	-

Note. Reference Table 15 for a description of each belief.

[a] Participants were asked how frequently they screen for adult ADHD in their assessment intakes from Never (1) to Always (4)

[b] Participants were asked to indicate their level of current training in ADHD.

* $p < .05$. ** $p < .01$.

Mann-Whitney U Test

The belief that it is more difficult to diagnose ADHD than other psychological disorders (Belief 11) was significantly higher in the group that did not accept child ADHD assessment referrals (Median = 2, n = 79) than the group that did (Median = 2, n = 113), U = 3667.5, z = -2.178, p = .029, r = -.16.

The belief that emotion dysregulation is a core feature of ADHD (Belief 7) was significantly higher in the group that did accept child ADHD assessment referrals (Median = 4, n = 113) than the group that did not (Median = 4, n = 79), U = 3680.5, z = -2.912, p = .004, r = -.16.

The belief that ADHD is a hereditary condition (Belief 18) was significantly higher in the group that did accept child ADHD assessment referrals (Median = 4, n = 113) than the group that did not (Median = 4, n = 79), U = 3445.5, z = -2.186, p = .004, r = -.21. Table 17 depicts the results.

Table 17

Mann-Whitney U Results of Beliefs Between Participants That Accepted Child ADHD Assessment Referrals Versus Those That Did Not by Each of the Questions

Belief		Group (accepts child ADHD Ax referrals)	*N*	Mean rank	U	Z	*p*
1	ADHD is a disorder that only affects children	No	79	96.30	4448.0	-.106	.915
		Yes	113	96.64			
2	A combination of medication and psychotherapy is the most effective treatment for ADHD	No	79	91.32	4054.0	-1.205	.228
		Yes	113	100.12			
3	ADHD is overdiagnosed	No	79	103.02	3948.5	-1.404	.160
		Yes	113	91.94			
4	ADHD is a behavioural problem	No	79	95.58	4390.5	-.200	.841
		Yes	113	97.15			
5	It is difficult to treat individuals with ADHD	No	79	104.76	3811.0	-1.796	.073
		Yes	113	80.73			
6	ADHD is a disorder that persists into adulthood	No	79	96.05	4428.0	-.115	.908
		Yes	113	96.81			
7	Emotion dysregulation is a core feature of ADHD	No	79	85.59	3680.5	-2.186	.029*
		Yes	113	103.43			
8	Most adults seeking assessment for ADHD are malingering to receive stimulant medication	No	79	92.03	4110.0	-1.138	.255
		Yes	113	99.63			
9	ADHD results from parents being inconsistent with rules and consequences	No	79	100.45	4151.5	-1.286	.198
		Yes	113	93.74			
10		No	79	99.59	4219.5	-.716	.474

Belief		Group (accepts child ADHD Ax referrals)	*N*	Mean rank	U	Z	*p*
	Stimulant therapy for ADHD creates a risk for later substance abuse	Yes	113	94.34			
11	It is more difficult to diagnose ADHD than other psychological disorders	No	79	106.58	3667.5	-2.178	.029*
		Yes	113	89.46			
12	Dietary changes can treat ADHD symptoms	No	79	99.73	4208.0	-.698	.485
		Yes	113	94.24			
13	Stimulant medications do not benefit adults with ADHD	No	79	102.32	4004.0	-1.528	.127
		Yes	113	92.43			
14	ADHD does not occur in individuals with higher-than-average intelligence	No	79	98.50	4305.5	-.958	.338
		Yes	113	95.10			
15	Children diagnosed with ADHD can continue to be impaired by the disorder in adulthood	No	79	92.48	4146.0	-1.119	.263
		Yes	113	99.31			
16	ADHD often co-occurs with other psychological disorders	No	79	95.05	4349.0	-.369	.712
		Yes	113	97.51			
17	The presence of another psychological disorder rules out a diagnosis of ADHD	No	79	101.33	4082.0	-1.424	.154
		Yes	113	93.12			
18	ADHD is a hereditary condition	No	79	83.61	3445.5	-.2.912	.004*
		Yes	113	105.51			
19	ADHD is not a real disorder	No	79	96.34	4450.5	-.089	.929
		Yes	113	96.62			
20	ADHD only affects males	No	79	95.43	4379.0	-.687	.492
		Yes	113	97.25			

Belief		Group (accepts child ADHD Ax referrals)	*N*	Mean rank	U	Z	*p*
21	ADHD should be assessed and treated by individuals with specialized training in this area of psychology	No	79	92.66	4160.0	-.900	.368
		Yes	113	99.19			
22	ADHD is caused by an attachment disorder	No	79	101.41	4075.5	-1.394	.163
		Yes	113	93.07			
23	ADHD is a neurological disorder	No	79	90.62	3999.0	-1.431	.153

Note. Ax = assessment; U = Mann Whitney U test statistic (reflects the difference between the two rank totals); Z = Z-score (measures the difference between two independent samples); *p* = p-value (probability that measures the evidence against the null hypothesis).

* $p < .05$.

The second analysis revealed insignificant differences in the level of beliefs between participants who accepted adult ADHD assessment referrals and those that did not. This suggests that though there may have been differences in beliefs between participants who did accept adult ADHD assessment referrals and those that did not, the differences were not significant. Table 18 depicts the results

Table 18

Mann-Whitney U Results of Beliefs Between Participants That Accepted Adult ADHD Assessment Referrals and Those That Did Not

Belief		Group (accepts adult ADHD Ax referrals)	*N*	Mean rank	U	Z	*p*
1	ADHD is a disorder that only affects children	No	66	97.25	4108.5	-.352	.725
		Yes	126	96.11			
2	A combination of medication and psychotherapy is the most effective treatment for ADHD	No	66	94.91	4053.0	-.320	.749
		Yes	126	97.33			
3	ADHD is overdiagnosed	No	66	103.57	3691.5	-1.318	.188
		Yes	126	92.80			
4	ADHD is a behavioural problem	No	66	94.73	4041.5	-.331	.741
		Yes	126	97.42			
5	It is difficult to treat individuals with ADHD	No	66	97.34	4102.5	-.158	.874
		Yes	126	96.06			
6	ADHD is a disorder that persists into adulthood	No	66	90.92	3789.5	-1.242	.214
		Yes	126	99.42			
7	Emotion dysregulation is a core feature of ADHD	No	66	90.99	3789.5	-1.052	.293
		Yes	126	99.38			
8	Most adults seeking assessment for ADHD are malingering to receive stimulant medication	No	66	105.37	3794.5	-1.953	.051
		Yes	126	91.85			
9	ADHD results from parents being inconsistent with rules and consequences	No	66	102.57	3572.5	-1.711	.087
		Yes	126	93.32			

Belief		Group (accepts adult ADHD Ax referrals)	*N*	Mean rank	U	Z	*p*
10	Stimulant therapy for ADHD creates a risk for later substance abuse	No	66	98.57	4021.5	-.415	.678
		Yes	126	95.42			
11	It is more difficult to diagnose ADHD than other psychological disorders	No	66	103.07	3724.5	-1.229	.219
		Yes	126	93.06			
12	Dietary changes can treat ADHD symptoms	No	66	97.25	4108.5	-.140	.889
		Yes	126	96.11			
13	Stimulant medications do not benefit adults with ADHD	No	66	98.42	4031.5	-.436	.663
		Yes	126	95.50			
14	ADHD does not occur in individuals with higher-than-average intelligence	No	66	98.73	4010.5	-.926	.354
		Yes	126	95.33			
15	Children diagnosed with ADHD can continue to be impaired by the disorder in adulthood	No	66	95.47	4090.0	-.248	.804
		Yes	126	97.04			
16	ADHD often co-occurs with other psychological disorders	No	66	95.52	4093.0	-.217	.828
		Yes	126	97.02			
17	The presence of another psychological disorder rules out a diagnosis of ADHD	No	66	101.12	3853.0	-1.180	.238
		Yes	126	94.08			
18	ADHD is a hereditary condition	No	66	90.97	3793.0	-1.082	.279
		Yes	126	99.40			
19	ADHD is not a real disorder	No	66	97.29	4106.0	-.369	.712
		Yes	126	96.09			
20	ADHD only affects males	No	66	98.82	4005.0	-1.289	.198
		Yes	126	95.29			

Belief		Group (accepts adult ADHD Ax referrals)	*N*	Mean rank	U	Z	*p*
21	ADHD should be assessed and treated by individuals with specialized training in this area of psychology	No	66	103.75	3679.5	-1.470	.142
		Yes	126	92.70			
22	ADHD is caused by an attachment disorder	No	66	93.23	3942.0	-.804	.421
		Yes	126	98.21			
23	ADHD is a neurological disorder	No	66	103.44	3700.0	-1.462	.144
		Yes	126	92.87			

Note. Ax = assessment; Tx = therapy; U = Mann Whitney U test statistic (reflects the difference between the two rank totals); Z= Z-score (measures the difference between two independent samples); p = *p*-value (probability that measures the evidence against the null hypothesis).

The belief that most adults seeking assessment for ADHD are malingering to receive stimulant medication (Belief 8) was significantly higher in the group that did not accept adult ADHD therapy referrals (Median = 1, $n = 42$) than the group that did (Median = 1, $n = 160$), U = 2617.0, z = -2.745, $p = .006$, $r = -.19$. Table 19 depicts the results.

Table 19

Mann-Whitney U Results of Beliefs Between Participants That Accepted Adult ADHD Therapy Referrals and Those That Did Not

Belief		Group (accepts adult ADHD Tx referrals)	*N*	Mean rank	U	Z	*p*
1	ADHD is a disorder that only affects children	No	42	104.44	3326.50	-.861	.389
		Yes	160	100.73			
2	A combination of medication and psychotherapy is the most effective treatment for ADHD	No	42	106.23	3161.5	-.642	.521
		Yes	160	100.26			
3	ADHD is overdiagnosed	No	42	106.17	3164.0	-.600	.549
		Yes	160	100.28			
4	ADHD is a behavioural problem	No	42	106.64	3228.0	-.408	.683
		Yes	160	100.68			
5	It is difficult to treat individuals with ADHD	No	42	99.26	3266.0	-.290	.772
		Yes	160	102.09			
6	ADHD is a disorder that persists into adulthood	No	42	102.12	3334.0	.096	.924
		Yes	160	101.34			
7	Emotion dysregulation is a core feature of ADHD	No	42	104.14	3249.0	.351	.726
		Yes	160	100.81			
8	Most adults seeking assessment for ADHD are malingering to receive stimulant medication	No	42	119.19	2617.0	-2.745	.006*
		Yes	160	98.86			
9	ADHD results from parents being inconsistent with	No	42	100.36	3312.0	-.205	.838
		Yes	160	101.80			

Belief		Group (accepts adult ADHD Tx referrals)	*N*	Mean rank	U	Z	*p*
	rules and consequences						
10	Stimulant therapy for ADHD creates a risk for later substance abuse	No	42	105.23	3203.5	-.509	.611
		Yes	160	100.52			
11	It is more difficult to diagnose ADHD than other psychological disorders	No	42	94.80	3078.5	-.864	.388
		Yes	160	103.26			
12	Dietary changes can treat ADHD symptoms	No	42	106.92	3132.5	-.698	.485
		Yes	160	100.08			
13	Stimulant medications do not benefit adults with ADHD	No	42	105.19	3205.0	-.568	.570
		Yes	160	100.53			
14	ADHD does not occur in individuals with higher-than-average intelligence	No	42	99.38	3271.0	-.600	.549
		Yes	160	102.06			
15	Children diagnosed with ADHD can continue to be impaired by the disorder in adulthood	No	42	101.74	3350.0	-.038	.969
		Yes	160	101.44			
16	ADHD often co-occurs with other psychological disorders	No	42	96.87	3165.5	-.688	.492
		Yes	160	102.72			
17	The presence of another psychological disorder rules out a diagnosis of ADHD	No	42	96.36	3144.0	-.891	.373
		Yes	160	102.85			
18	ADHD is a hereditary condition	No	42	108.02	3086.0	-.878	.380
		Yes	160	99.79			

Belief		Group (accepts adult ADHD Tx referrals)	*N*	Mean rank	U	Z	*p*
19	ADHD is not a real disorder	No	42	104.52	3233.0	-.886	.376
		Yes	160	100.71			
20	ADHD only affects males	No	42	102.81	3305.0	-.515	.607
		Yes	160	101.16			
21	ADHD should be assessed and treated by individuals with specialized training in this area of psychology	No	42	107.83	3094.0	-.899	.368
		Yes	160	99.84			
22	ADHD is caused by an attachment disorder	No	42	91.69	2948.0	-1.527	.127
		Yes	160	104.08			
23	ADHD is a neurological disorder	No	42	107.02	3128.0	-.787	.431
		Yes	160	100.05			

Note. Tx = therapy; U = Mann Whitney U test statistic (reflects the difference between the two rank totals); Z = Z-score (measures the difference between two independent samples); p = *p*-value (probability that measures the evidence against the null hypothesis).

* $p < .05$

The belief that ADHD is overdiagnosed (Belief 3) was significantly higher in the group that did not specifically treat adult ADHD in their practice (Median = 4, $n = 51$) than the group that did (Median = 3, $n = 109$), U = 2022.0, z = -2.853, $p = .004$, $r = -.23$. The belief that it is difficult to treat individuals with ADHD (Belief 5) was significantly higher in the group that did not specifically treat adult ADHD in their practice (Median = 3, $n = 51$) than the group that did (Median = 2,

n = 109), U = 2151.5, z = -2.386, *p* = .017, *r* = -.19. The belief that ADHD does not occur in individuals with higher-than-average intelligence (Belief 14) was significantly higher in the group that did not specifically treat adult ADHD in their practice (Median = 1, *n* = 51) than the group that did (Median = 1, *n* = 109), U = 2445.5, z = -2.679, *p* = .007, *r* = -.21. The belief that ADHD is a hereditary condition (Belief 18) was significantly lower in the group that did not specifically treat adult ADHD in their practice (Median = 4, *n* = 51) than the group that did (Median = 4, *n* = 109), U = 2213.5, z = -2.245, *p* = .025, *r* = -.18. The belief that ADHD is a neurological disorder (Belief 23) was significantly lower in the group that did not specifically treat adult ADHD in their practice (Median = 4, *n* = 51) than the group that did (Median = 5, *n* = 109), U = 2214.5, z = -2.346, *p* = .019, *r* = -.19. Table 20 depicts the results.

Table 20

Mann-Whitney U Test of Significance for Beliefs of Participants That Specifically Treated Adult ADHD in Their Practice Versus Those That Did Not

Belief		Group (specifically treat adult ADHD)	*N*	Mean rank	U	Z	*p*
1	ADHD is a disorder that only affects children	No	51	83.65	2619.0	-1.472	.141
		Yes	109	79.03			
2	A combination of medication and psychotherapy is the most effective treatment for ADHD	No	51	72.36	2364.0	-1.651	.099
		Yes	109	84.31			
3	ADHD is overdiagnosed	No	51	95.35	2022.0	-2.853	.004*
		Yes	109	73.55			
4	ADHD is a behavioural problem	No	51	80.64	2772.5	-.027	.979
		Yes	109	80.44			
5	It is difficult to treat individuals with ADHD	No	51	92.81	2151.5	-2.386	.017*
		Yes	109	74.74			
6	ADHD is a disorder that persists into adulthood	No	51	78.33	2669.0	-.502	.616
		Yes	109	81.51			
7	Emotion dysregulation is a core feature of ADHD	No	51	81.31	2738.0	-.162	.871
		Yes	109	80.12			
8	Most adults seeking assessment for ADHD are malingering to receive stimulant medication	No	51	80.20	2764.0	-.075	.940
		Yes	109	80.64			

Belief		Group (specifically treat adult ADHD)	*N*	Mean rank	U	Z	*p*
9	ADHD results from parents being inconsistent with rules and consequences	No	51	81.36	2735.5	-.231	.817
		Yes	109	80.10			
10	Stimulant therapy for ADHD creates a risk for later substance abuse	No	51	87.83	2405.5	-1.511	.131
		Yes	109	77.07			
11	It is more difficult to diagnose ADHD than other psychological disorder	No	51	88.63	2365.5	-1.569	.117
		Yes	109	76.70			
12	Dietary changes can treat ADHD symptoms	No	51	85.58	2520.5	-.982	.326
		Yes	109	78.12			
13	Stimulant medications do not benefit adults with ADHD	No	51	87.27	2434.0	-1.580	.114
		Yes	109	77.33			
14	ADHD does not occur in individuals with higher-than-average intelligence	No	51	87.05	2445.5	-2.679	.007*
		Yes	109	77.44			
15	Children diagnosed with ADHD can continue to be impaired by the disorder in adulthood	No	51	75.95	2547.5	-1.100	.271
		Yes	109	82.63			
16	ADHD often co-occurs with other psychological disorders	No	51	78.57	2681.0	-.426	.670
		Yes	109	81.40			

Belief		Group (specifically treat adult ADHD)	*N*	Mean rank	U	Z	*p*
17	The presence of another psychological disorder rules out a diagnosis of ADHD	No	51	82.94	2655.0	-.620	.535
		Yes	109	79.36			
18	ADHD is a hereditary condition	No	51	69.40	2213.5	-2.245	.025*
		Yes	109	85.69			
19	ADHD is not a real disorder	No	51	82.27	2689.0	-.830	.406
		Yes	109	79.67			
20	ADHD only affects males	No	51	81.14	2747.0	-.395	.693
		Yes	109	80.20			
21	ADHD should be assessed and treated by individuals with specialized training in this area of psychology	No	51	85.46	2526.5	-1.050	.294
		Yes	109	78.18			
22	ADHD is caused by an attachment disorder	No	51	84.41	2580.0	-.888	.375
		Yes	109	78.67			
23	ADHD is a neurological disorder	No	51	69.42	2214.5	-2.346	.019*
		Yes	109	85.68			

Note. U = Mann Whitney U test statistic (reflects the difference between the two rank totals); Z = Z-score (measures the difference between two independent samples); p = *p*-value (probability that measures the evidence against the null hypothesis).

Training

All participants were asked about their current training levels regarding ADHD, as well as their interest in receiving a specialized training program in

working with adult ADHD. The response frequencies are depicted in Table 21. Notably, over half of participants indicated that they had received training in ADHD and felt competent working with ADHD. Moreover, around half of participants also indicated that they would be interested in a multi-day and comprehensive training program on ADHD.

Table 21

Prior Training and Future Training Interests of Participants Relating to ADHD

	Total sample (N = 231)	
Training	*n*	%
Current training level		
I have not received specialized training in this area.	28	12.1%
I have received training in ADHD but not feel equipped to diagnose or treat ADHD.	19	8.2%
I have received training in ADHD and feel competent working with ADHD.	130	56.3%
I consider myself an ADHD specialist.	23	10.0%
I consider myself an ADHD specialist and train other psychologists in this domain.	18	7.8%
Other [a]	13	5.6%
Training interests		
I am not interested in attending a training program.	23	10.0%
I would be interested in a short (e.g., 1 hour) training program.	67	29.0%
I would be interested in a half to full day program.	7	3.0%
I would be interested in a multi-day and comprehensive training program.	113	48.9%
I would be interested in facilitating a training program.	11	4.8%
Other [b]	10	4.3%

Note. N = total sample for this question; n = frequency of responses.

[a] Participants who selected "other" for this question indicated that they felt better equipped to assess than treat ADHD, several indicated that they felt mostly competent in working with ADHD but would like to continue to learn more, and some indicated that they felt competent working with children with ADHD but not adults.

[b] Several participants that selected "other" included seven responses noting that they would be interested in a half to full day program. The other 10 responses referred to one of the following suggestions: continuing education to further their skills, such as advanced training or learning about new developments by experts in the field; a workshop that they completed on their own time over several days; and a training program for staff at their practice.

Correlational Analysis

There were significant negative correlations between current training level and Belief 3 (ADHD is overdiagnosed), Belief 5 (It is difficult to treat individuals with ADHD), Belief 9 (ADHD results from parents being inconsistent with rules and consequences), Belief 10 (Stimulant therapy for ADHD creates a risk for later substance abuse), Belief 13 (Stimulant medications do not benefit adults with ADHD), Belief 14 (ADHD does not occur in individuals with higher-than-average intelligence), and Belief 22 (ADHD is caused by an attachment disorder). There were significant positive correlations between current level of training and Belief 15 (Children diagnosed with ADHD can continue to be impaired by the

disorder in adulthood), Belief 18 (ADHD is a hereditary condition), and Belief 23 (ADHD is a neurological disorder). Table 16 depicted the results.

There was a positive significant correlation between training level and frequency of screening for ADHD in the initial intake. This suggests that individuals with higher levels of training were more likely to screen for ADHD in their initial intake sessions, and vice versa. Results are depicted in Table 22.

Table 22

Correlation Between Training Levels and Screening for ADHD

Variable	*n*	*M*	*SD*	1. Current training level [a]	2. Screening for ADHD [b]
1. Current training level (0-4) [a]	218	1.93	1.02	-	.49**
2. Screening for ADHD [b]	181	2.96	0.98	.49**	-

Note. *N* = total sample for this question; *n* = frequency of responses.

** $p < .01$.

[a] Training levels were quantified as 0 = I have not received specialized training in this area, 1 = I have received training on ADHD but do not feel equipped to diagnose or treat ADHD, 2 = I have received training on ADHD and feel competent in working with ADHD, 3 = I consider myself an ADHD specialist, and 4 = I consider myself an ADHD specialist and I train other psychologists in this domain. "Other" was not quantified or included in this analysis.

[b] Screening for ADHD was quantified as 1= Never, 2 = Sometimes, 3 = Often, and 4 = Very Often.

Mann-Whitney U Test

Training levels were significantly higher for participants who accepted child ADHD assessment referrals (Median = 2, n = 108) than those that did not (Median = 2, n = 73), U = 2958.0, z = -3.308, $p < .001$, r = -.25. Training levels were significantly higher for participants who accepted adult ADHD assessment referrals (Median = 2, n = 121) than those who did not (Median = 2, n = 60), U = 2054.0, z = -5.520, $p < .001$, r = -.41. Training levels were significantly higher for participants who specifically treated adult ADHD in their practice (Median = 2, n = 104), than those who did not (Median = 1, n = 44), U = 1004.0, z = -5.958, $p <$ .001, r = -.49. The test revealed insignificant differences in training level between participants who accepted adult ADHD therapy referrals and those who did not. Table 23 portrays the results.

Table 23

Mann-Whitney U Tests Results for Training Levels of Participants' Assessment and Treatment Practices

Group	*N*	Mean rank	U	Z	*p*
Accepts Child ADHD Ax referrals					
No	73	77.52	2958.0	-3.308	<.001*
Yes	108	100.11			
Accepts adult ADHD Ax referrals					
No	60	64.73	2054.0	-5.520	<.001*
Yes	121	104.02			
Accepts adult ADHD Tx referrals					
No	41	86.98	2705.0	-1.185	.236
Yes	148	97.22			
Specifically treat adult ADHD					
No	44	45.32	1004.0	-5.958	<.001*
Yes	104	86.85			

Note. *N* = total sample for this question; *n* = frequency of responses; Ax = assessment; Tx = therapy.

* $p < .001$.

Post-Hoc: Binomial Logistic Regression

Regression 1: Do Beliefs/Training Predict Acceptance of Adult ADHD Assessment Referrals?

Results of regression 1 are listed in Table 24. The logistic regression model was statistically significant, χ^2 (27, N = 181), = 76.69, $p < .001$. The model

explained 48.0% (Nagelkerke R2) of the variance in accepting adult ADHD assessment referrals (Deviance = 153.26) and correctly classified 82.3% of cases.

Belief 8: Most adults seeking assessment for ADHD are malingering to receive stimulant medication (B = -0.848, SE = 0.354, p = .02); Belief 21: ADHD should be assessed and treated by individuals with specialized training in this area of psychology (B = -0.722, SE = 0.320, p = .02); and current training levels (Wald = 21.245, p < .001) were significant predictors of acceptance of adult ADHD assessment referrals. The coefficients for Beliefs 8 and 21 were negative, indicating that lower levels of these beliefs were associated with a higher likelihood of accepting ADHD assessment referrals. Training levels 2 (B = 2.99, SE = 0.77, p < .001), 3 (B = 4.69, SE = 1.14, p < .001), and 4 (B = 4.12, SE = 1.12, p < .001) were all significant predictors of acceptance of ADHD assessment referrals, with each additional level of training acting as a more significant predictor than the last.

Overall, the findings of this analysis indicate that individuals who held lower levels of the beliefs that most adults seeking assessment for ADHD are malingering to receive stimulant medication, and that ADHD should be assessed and treated by individuals with specialized training in this area of psychology, along with at least some training in ADHD assessment and treatment were more likely to accept adult ADHD assessment referrals in their practice.

Table 24

Logistic Regression Results for Acceptance of Adult ADHD Assessment Referrals

Variable	B	SE	95% CI for B		*p*
			LL	UL	
Constant	1.53	2.52	-	-	.543
Belief 1	-0.35	.740	1.7	3.02	.641
Belief 2	0.06	.200	.72	1.57	.766
Belief 3	-0.03	.189	.67	1.41	0.887
Belief 4	0.19	.204	.81	1.80	.354
Belief 5	0.35	.234	.90	2.25	.135
Belief 6	-0.07	.317	.50	1.74	.827
Belief 7	0.38	.23	.93	2.29	.096
Belief 8	-0.85	.35	.21	0.86	.017
Belief 9	-0.52	.35	.30	1.17	.132
Belief 10	0.38	.30	.80	2.64	.217
Belief 11	0.08	.20	.73	1.61	.695
Belief 12	0.05	.23	.68	1.63	.830
Belief 13	0.41	.46	.61	3.68	.374
Belief 14	0.10	.75	.25	4.78	.896
Belief 15	0.004	.35	.51	1.99	.991
Belief 16	-0.03	.38	.47	2.03	.943
Belief 17	-0.04	.35	.48	1.90	.917
Belief 18	0.13	.27	.66	1.96	.640
Belief 19	0.35	.82	.28	7.12	.670
Belief 20	-1.45	1.43	.01	3.90	.313
Belief 21	-0.72	.32	.26	0.91	.024
Belief 22	0.48	.40	.74	3.53	.227
Belief 23	-0.63	.35	.27	1.07	.076
Training 0	-	-	-	-	<.001
Training 1	-19.79	11095.98	0.00	-	.999
Training 2	2.99	0.77	4.40	89.00	<.001
Training 3	4.69	1.14	11.77	1007.12	<.001
Training 4	4.12	1.12	6.85	552.38	<.001

Note. Reference Table 15 for a description of each belief. LL and UL indicate the lower and upper limits of a confidence interval (CI), respectively. B indicates the beta statistic. SE references the standard error. P represents the p-value, which was significant at <.05.

Regression 2: Do Beliefs/Training Predict Acceptance of Adult ADHD Treatment Referrals?

Results of regression 2 are listed in Table 25. The logistic regression model was not considered statistically significant, χ^2 (27, N = 189), = 26.92, p = .47. The model explained 20.5% (Nagelkerke R2) of the variance in accepting adult ADHD treatment referrals (Deviance = 170.77) and correctly classified 80.4% of cases.

Table 25

Regression for Acceptance of Adult ADHD Treatment Referrals

Variable	B	S.E.	95% CI for B		*p*
			LL	UL	
Constant	3.98	2.38	-	-	0.095
Belief 1	-0.14	0.40	0.40	1.88	0.716
Belief 2	0.006	0.20	0.68	1.49	0.978
Belief 3	-0.12	0.20	0.61	1.31	0.552
Belief 4	0.03	0.18	0.72	1.48	0.863
Belief 5	0.03	0.21	0.68	1.56	0.907
Belief 6	-0.34	0.37	0.34	1.47	0.355
Belief 7	0.01	0.23	0.64	1.60	0.961
Belief 8	-0.73	0.31	0.27	0.88	0.018
Belief 9	-0.01	0.35	0.50	1.96	0.968
Belief 10	0.15	0.25	0.71	1.88	0.549
Belief 11	0.27	0.20	0.89	1.92	0.169
Belief 12	-0.24	0.21	0.52	1.18	0.242
Belief 13	<0.01	0.41	0.50	2.25	0.994
Belief 14	0.33	0.77	0.31	6.34	0.664
Belief 15	0.26	0.31	0.71	2.36	0.408
Belief 16	0.36	0.38	0.68	3.01	0.345

Variable	B	S.E.	95% CI for B		*p*
			LL	UL	
Belief 17	0.68	0.49	0.76	5.17	0.163
Belief 18	0.04	0.27	0.62	1.76	0.868
Belief 19	-0.10	0.50	0.34	2.41	0.845
Belief 20	-1.36	1.22	0.02	2.81	0.265
Belief 21	-0.46	0.32	0.33	1.19	0.155
Belief 22	0.38	0.31	0.80	2.69	0.221
Belief 23	-0.05	0.27	0.56	1.61	0.852
Training 0	-	-	-	-	0.142
Training 1	-1.09	0.80	0.07	1.60	0.171
Training 2	-0.41	0.63	0.19	2.28	0.518
Training 3	1.56	1.24	0.42	53.61	0.206
Training 4	0.73	1.0	0.30	14.41	0.459

Note. Reference Table 15 for a description of each belief. LL and UL indicate the lower and upper limits of a confidence interval (CI), respectively. B indicates the beta statistic. SE references the standard error. P represents the p-value, which was significant at <.05.

Regression 3: Do Beliefs/Training Predict Provision of Specific Treatment for Adult ADHD Symptoms?

Results of regression 3 are listed in Table 26. The logistic regression model was statistically significant, χ^2 (27, N = 148), = 74.99, p < .001. The model explained 56.5% (Nagelkerke R2) of the variance in providing specific treatment for adult ADHD symptoms (Deviance = 105.14) and correctly classified 84.5% of cases.

The results showed that Belief 8: Adults seeking assessment for ADHD are malingering to receive stimulant medication (B = -1.156, SE = 0.508, p = .02); Belief 14: ADHD does not occur in individuals with higher than average

intelligence (B = -3.47, SE = 1.36, p = .01); Belief 23: ADHD is a neurological disorder (B = 0.77, SE = 0.331, p = .02); and training level 2 (B = 2.43, SE = 0.76, p = .002) were all predictors of provision of specific treatment for adult ADHD symptoms. The coefficient for Beliefs 8, 14, and training level 2 were all negative, indicating that a lower level of these items was associated with a higher likelihood of provision of specific treatment for adult ADHD symptoms. Conversely, higher levels of Belief 23 were associated with a higher likelihood of provision of specific treatment for adult ADHD symptoms. The results of this analysis suggest that lower levels of the beliefs that adults seeking assessment for ADHD are malingering to receive stimulant medication and that ADHD does not occur in individuals with higher-than-average intelligence, with higher levels of beliefs that ADHD is a neurological disorder, in conjunction with a Level 2 training, predicted a higher likelihood of accepting adult ADHD treatment referrals. It should be noted that additional training above Level 2 (i.e., Level 3 and Level 4) did not increase the strength of the equation. This indicates that having had some training in ADHD, even without feeling equipped to diagnose or treat ADHD, significantly predicts provision of treatment for specific adult ADHD symptoms, more than having no training at all.

Table 26

Logistic Regression Results for Provision of Specific Treatment for Adult ADHD Symptoms

Variable	B	S.E.	95% CI for B		*p*
			LL	UL	
Constant	5.86	3.18	-	-	0.065
Belief 1	0.70	0.50	0.76	5.34	0.157
Belief 2	0.25	0.30	0.72	2.30	0.4
Belief 3	-0.44	0.26	0.39	1.07	0.09
Belief 4	0.47	0.29	0.91	2.82	0.105
Belief 5	-0.21	0.29	0.46	1.43	0.471
Belief 6	-0.18	0.42	0.36	1.91	0.667
Belief 7	-0.41	0.34	0.34	1.30	0.229
Belief 8	-1.16	0.51	1.17	8.60	0.023
Belief 9	0.56	0.46	0.71	4.27	0.222
Belief 10	-0.57	0.34	0.29	1.10	0.094
Belief 11	-0.13	0.25	0.54	1.43	0.6
Belief 12	-0.20	0.30	0.46	1.46	0.492
Belief 13	0.18	0.47	0.47	3.01	0.706
Belief 14	-3.47	1.36	<0.01	0.44	0.01
Belief 15	0.74	0.51	0.77	5.71	0.145
Belief 16	0.85	0.46	0.95	5.79	0.064
Belief 17	-0.05	0.53	0.34	2.71	0.931
Belief 18	-0.09	0.36	0.45	1.89	0.807
Belief 19	-0.50	1.16	0.06	5.90	0.669
Belief 20	2.17	2.05	0.16	484.91	0.288
Belief 21	-0.75	0.42	0.21	1.08	0.074
Belief 22	0.53	0.45	0.70	4.12	0.239
Belief 23	0.77	0.33	1.12	4.12	0.021
Training 0	-	-	-	-	0.004
Training 1	-0.66	1.06	0.07	4.13	0.534
Training 2	2.42	0.76	2.53	50.58	0.002

Variable	B	S.E.	95% CI for B		*p*
			LL	UL	
Training 3	25.98	6766.89	0	-	0.997
Training 4	1.83	1.13	0.68	56.78	0.104

Note. See Table 15 for a description of each belief. LL and UL indicate the lower and upper limits of a confidence interval (CI), respectively. B indicates the beta statistic. SE references the standard error. P represents the p-value, which was significant at <.05.

Chapter IV: Discussion and Future Directions

The purpose of this study was to collect data on the assessment and treatment practices of psychologists in Canada regarding adult ADHD. Overall, results aligned with the existing literature as well as the hypotheses of the current study, and have implications for both assessment and treatment practices. Additionally, the findings shed light on the potential for developing future training programs to enhance practitioners' expertise and knowledge in this domain, reduce stigma, and provide increased access to services for clients.

Implications for Assessment and Diagnosis of Adult ADHD

A large majority of the participants (83.1%) in this study reported offering general psychological assessment services to varying extents within their practice. Though most individuals who reported accepting assessments indicated that they received referrals for ADHD assessments (96.9%), only 65% indicated they accepted adult ADHD assessment referrals. These findings align with the hypothesis of the current study that there would be a lower acceptance rate of adult ADHD assessment referrals among psychologists compared to the overall population. There is a substantial disparity between the estimated 1.1 million Canadian adults with ADHD (Centre for ADHD Awareness Canada [CADDAC], n.d.) and the mere 18,010 practising psychologists in the country (Statistics Canada, 2015). Even if just over half (65%) of practising psychologists accept adult ADHD assessment referrals, it will result in an overwhelming workload of

approximately 93 adults with ADHD per psychologist. Moreover, this 65% figure is likely an overestimate due to the potential selection bias in the study (refer to the limitation section for a more in-depth discussion). Consequently, it comes as no surprise that waitlists for ADHD assessments are lengthy and that the scarcity of psychologists available to assess ADHD is felt throughout the entire country.

Participants who reported declining adult ADHD assessment referrals were asked about their protocol when they did receive an ADHD assessment referral. Their responses included protocols that, though initially appearing supportive, inadvertently created additional barriers for their clients. They reported referring clients to another psychologist or medical professional for a specialized ADHD assessment, referring clients to a medical doctor, or referring clients to a psychiatrist. Although it is commendable that these clinicians are taking steps to support these clients, their reported practices only contribute to further waitlists for psychologists who do accept assessments, as a result creating additional hurdles for clients.

Additionally, research with primary care physicians, nurse practitioners, and psychiatrists indicates high misdiagnosis and missed diagnosis rates, a shortage of practitioners to conduct these assessments, insufficient education and training, and stigmatizing beliefs these professionals hold (Faraone et al., 2004; French et al., 2019; Knutson & O'Malley, 2010). This situation raises the question of whether it is the responsibility of psychologists, whose primary role entails

assessing, diagnosing, and treating mental health disorders, to become more knowledgeable about adult ADHD instead of passing this duty on to other diagnosing professionals.

Many participants (90.6%) indicated that they actively screened for adult ADHD as part of their comprehensive assessment process. Based on the findings of the current study, beliefs about ADHD do play a role in whether psychologists screen for ADHD in their initial assessment intake. Lower levels of certain misconceptions and higher levels of certain accurate beliefs were associated with higher screening levels for ADHD in the initial intake. The role of beliefs is addressed later in this discussion section. It is important to note, however, that including ADHD screening as a routine part of the overall assessment process is important in preventing overlooked diagnoses and ensuring more accurate evaluations.

Reasons for Not Accepting Adult ADHD Assessment Referrals

Over half of the participants (58.5%) indicated that their reason for declining adult ADHD assessment referrals was a perceived lack of qualification or expertise in this area. This finding is consistent with previous research highlighting that one of the key barriers to an ADHD diagnosis is a lack of training among clinicians (French et al., 2019). Understandably, psychologists may be hesitant to accept referrals if they do not feel adequately trained to diagnose ADHD. However, when psychologists refer clients to colleagues for

ADHD assessments, it contributes to longer waitlists for psychologists who accept these referrals, creating additional barriers to timely treatment.

A small proportion of the participants (2.4%) expressed that they did not accept adult ADHD assessment referrals due to concerns about malingering to obtain stimulant medication. Though some basis for these concerns may be documented in the literature, most of the research on this topic has primarily been centred on college-aged students, with a significant gap in the literature on the adult population beyond the college age. Further research is necessary to better understand malingering trends in adults beyond the college age, which could potentially alleviate concerns and encourage clinicians to consider adult ADHD assessments more readily.

The current study found two interesting reasons cited for declining adult ADHD assessments: lack of time and proper tools for conducting these assessments. The ongoing misconception that ADHD assessments require complex neuropsychological measures, which are often costly and time-consuming and require specialized training, may perpetuate this issue. Though research indicates that the most effective measures for ADHD assessment include intake interviews and self-report questionnaires (Barkley, 2019; CADDRA, 2020; Fuermaier et al., 2019; Mapou, 2019; J. L. Young & Goodman, 2016), similar to other psychodiagnostic assessments, the current study revealed that a significant proportion of participants used multiple measures (six or more), including

neuropsychological tests like the WAIS-IV and D-KEFS. As discussed in the literature review, these measures are unnecessary for an initial ADHD diagnosis and can lead to missed diagnoses in many cases (Fuermaier et al., 2019). Moreover, these additional measures likely contribute to longer assessment times and costs for clinicians and clients, further adding to the long waitlists and reluctance among clinicians to conduct ADHD assessments. Instead, psychologists could invest in self-report and information questionnaires that assess ADHD symptoms, which can often be administered via telehealth and may be beneficial add-ons to their other psychodiagnostic assessments. Additionally, a supplemental sustained attention test like the CPT-3, which takes around 15–20 minutes to administer, can be helpful in cases where the diagnosis is ambiguous and clinicians feel that a neuropsychological measure is necessary. A telehealth version of this tool, such as the IVA-2, can even be used in its place to enhance accessibility for practitioners and clients in remote areas.

These practices probably persist due to a lack of education on the latest guidelines for ADHD assessment procedures. With further education and training, however, psychologists may become more open to conducting adult ADHD assessments themselves, alongside other psychodiagnostic assessments. This could lead to reduced assessment times, shorter waitlists, and decreased client costs.

In the same vein, some participants mentioned that they did not conduct adult ADHD assessments because it fell outside the scope of their practice. Though some clinicians may believe that assessing this disorder is limited to neuropsychologists due to its neurodevelopmental nature, it is essential to recognize that with proper education and training, all psychologists can and should be trained to identify ADHD symptoms using questionnaires and effective intake interviews. ADHD is increasingly being recognized as a condition that can underlie and coexist with other psychological disorders and should be treated as such.

Diagnostic Procedures

Participants in this study predominantly reported adhering to best practice guidelines for diagnosing adult ADHD. These practices included using *DSM-5* or ICD-10 diagnostic criteria, employing various assessment measures, gathering collateral information, and conducting a feedback session. Because the importance and utility of the feedback session were extensively discussed in the literature review, it is encouraging to note that many participants adhered to this practice.

One finding worth discussing stemmed from a question about the psychological assessment report. Findings from the current study indicated that most participants (99.8%) provided a report following an ADHD assessment either always, often, or sometimes. Although the provision of a psychological

report is standard, it may not be required. One participant indicated that they never provided reports due to their time-consuming nature and instead provided a short document indicating that diagnostic criteria were met. This practice goes against traditional report recommendations, which is an optimal range of six to 10 pages per report (Huff, 2020). Although many clinicians prefer comprehensive reports incorporating history, behavioural observations, detailed result descriptions, and extensive recommendation sections, others advocate for concise reports only presenting the assessment findings (Groth-Marnat & Horvath, 2006). Given the increasing demand for psychological assessments and the time-consuming nature of comprehensive reports, however, psychologists may benefit from revisiting their report-writing practices and considering the possibility of shorter reports.

Further research on the pros and cons of lengthier versus shorter reports would be valuable, as it could inform potential changes in report formats. Shorter reports would allow psychologists to allocate more time to serving more clients, reduce report costs, and prioritize much-needed treatment and follow-up appointments.

First-Time ADHD Assessments

Another interesting finding was that all participants indicated that at least some of their adult ADHD assessment clients were seeking an evaluation for ADHD for the first time. This aligns with the existing literature, which indicates

that most adults with ADHD are unaware of their condition or seeking a first-time diagnosis (Fayyad et al., 2007; Newcorn et al., 2007; Retz et al., 2011). This finding emphasizes the need for awareness among the general population, especially educators, regarding ADHD signs and symptoms in childhood. As mentioned, the long-term consequences of living with undiagnosed ADHD are significant and severe, and therefore early detection and diagnosis are crucial. With improvements in identification and intervention during childhood, psychological resources and services for adults with ADHD could prioritize treatment, coaching, and medication management rather than first-time assessment. Promoting early detection would enable individuals to access appropriate support and interventions from an earlier age, leading to improved outcomes and quality of life for individuals with ADHD and reduced healthcare costs for the country.

Teachers and school staff play a crucial role in identifying learning issues in children. These individuals may therefore be the ideal target for training programs on the early detection of ADHD within the classroom setting. This represents yet another area where psychologists can take the lead in ADHD research and the implementation of training programs. Providing educators with the knowledge and tools necessary to identify potential ADHD-related challenges in students at an early stage can ultimately prevent the development of further

challenges in adulthood, thereby improving the trajectory and quality of life for individuals affected by ADHD.

Implications for Treatment of Adult ADHD

A large proportion (79.2%) of the participants indicated that they accepted therapy referrals from adult clients with ADHD. However, not all those who endorsed accepting therapy referrals in their practice indicated that they specifically focused on treating adult ADHD symptoms with their clients. This suggests that though clinicians are open to working with adult ADHD clients, they may not be actively employing strategies to address the specific symptoms associated with ADHD, such as executive functioning deficits. The most common reasons participants cited for not directly targeting ADHD symptoms included not feeling competent (49%) and preferring to allocate therapy time to treating co-occurring mental health issues like anxiety and depression (35.3%). Many participants (35.3%) reported thinking another clinician may be more suitable to work on these issues. Some participants also noted that their priority was to address clients' "primary needs," which generally refers to the most apparent or immediate concerns. However, research suggests that it is the ADHD symptoms themselves that contribute to feelings of anxiety, depression, guilt, and shame (Gair et al., 2021; Powell et al., 2021; Riglin et al., 2021), ultimately leading to experiences of loneliness and isolation. Therefore, the "primary needs" of clients may indeed be the ADHD symptoms themselves. Consequently, improving

ADHD symptoms can positively impact co-occurring mental health problems (Kooij et al., 2019).

Additional to participants' reported reasons for not working on specific ADHD symptoms, the current study found that participants who did not work on specific ADHD symptoms in their therapy sessions were significantly more likely to hold certain beliefs about ADHD. The specific beliefs are discussed further in the discussion section. These findings suggest a potential explanation for a lack of focus on ADHD symptoms in therapy—treating psychologists may hold inaccurate beliefs about ADHD. Moreover, there may be a lack of understanding about the impact of ADHD on mental health. As a result, there may be an overreliance on medication and psychiatry to treat ADHD symptoms, with an underestimation of the effectiveness of addressing ADHD symptoms in therapy on overall treatment outcomes (Kooij et al., 2019).

Though psychologists must stay within the scope of their practice, ignoring ADHD symptoms in treatment may create a barrier for clients who would have to seek out a different practitioner to work on these issues. Given that the therapeutic alliance is crucial in predicting positive treatment outcomes (Flückiger et al., 2018), it would be most beneficial for clients to continue seeing the psychologist with whom they have already developed rapport and for psychologists instead to learn strategies to address specific ADHD symptoms proactively. Likely, increasing access to education and training programs on adult

ADHD for psychologists may result in more practitioners seeing the importance of and feeling comfortable addressing these issues in session.

Reasons for Not Accepting Therapy Referrals from Individuals With Adult ADHD

Close to half of the participants (47.6%) who noted refusing referrals from adult clients with ADHD stated that their reason for refusal was that they only worked with children. The remaining participants indicated that their reasons for refusal included that this was not an area of interest for them and they would prefer to refer these clients to their colleagues, that they did not feel they had the proper training to treat adult ADHD, and that they thought another clinician would be more suitable.

These responses appear interconnected, as those who lack interest or feel that another clinician would be more suitable likely do not have sufficient training around ADHD. ADHD is a complex and heterogenous condition with symptoms overlapping with many other disorders, such as anxiety, emotion dysregulation, low mood, lack of motivation, relationship issues, psychological trauma, and addiction. As previously mentioned, research suggests that ADHD often precludes many of these conditions (Gair et al., 2021; Powell et al., 2021; Riglin et al., 2021). Therefore, by not investigating or taking an interest in ADHD, clinicians may be missing a large part of the picture.

Given the ongoing misconceptions and misrepresentations of ADHD, clinicians are more likely to be misinformed about the actual presentation of the condition than genuinely disinterested in it. In fact, the current study revealed significant associations between specific misconceptions and psychologists' willingness to accept or decline therapy referrals from individuals with adult ADHD. These findings are discussed further down in this paper.

Nevertheless, clinicians must develop an interest in ADHD and seek training, especially considering the increasing number of individuals worldwide presenting with the disorder and the high comorbidity between ADHD and other conditions.

Treatment Practices With Adult ADHD Clients

There is robust evidence for the utility of psychotherapy in treating adults with ADHD. Therapy can provide a safe space for individuals with ADHD to experience corrective experiences, process difficult situations, and receive compassion while learning skills to improve executive functioning, attention, and relationships. Clinicians treating adult ADHD must use neurodiversity-affirming and evidence-based approaches. To do this, therapists should first work to understand their implicit biases relating to ADHD and educate themselves on the condition. Most importantly, psychologists should foster an environment of acceptance and understanding, using approaches that align with this practice.

Modalities. Participants in the current study most commonly endorsed cognitive behavioural therapy (CBT; 58.9%), dialectical behavioural therapy (DBT; 6.3%), acceptance and commitment therapy (ACT; 26.9%), and mindfulness training (11.9%) as their treatment modality for adult ADHD. This is unsurprising as these are the most commonly used and extensively researched therapeutic approaches with adult ADHD and boast significant positive outcomes in this population. More than half of the participants in the current study reported using CBT to treat their adult ADHD clients, which is the most widely used and researched form of therapy among the three (American Psychological Association, 2017).

It is worth noting that a considerable number of participants reported using an integrative/eclectic approach (10.6%), as well as other modalities (39.4%), such as narrative therapy, motivational interviewing, behavioural strategies, holistic/person centred, internal family systems, humanistic, EMDR, and lifestyle counselling (e.g., focus on diet and exercise). Though each of these approaches may have benefits, there is currently limited evidence for these approaches with adults with ADHD.

Understandably, psychologists use modalities most aligned with their values, abilities, and previous training and may be unwilling to switch modalities from client to client. However, integrating techniques from evidence-based modalities into their regular approach can be a viable alternative. Incorporating

skills from DBT, mindfulness, and ACT can enhance treatment outcomes related to emotion regulation, cognitive flexibility, shame reduction, attention span, and organization. On the other hand, it is also plausible that as clients experience improvements in their mental health symptoms (e.g., anxiety, depression) through alternate modalities, their ADHD symptoms may also improve. Thus, the fact that clients actively engage in therapy, particularly with clinicians with whom they have a strong rapport, is a positive.

Unfortunately, it is crucial to acknowledge that though research has been published on other modalities to treat adult ADHD (Lusk, 2019; Robinson et al., 2015), it is considerably limited. Thus, further research is necessary to explore the effectiveness of psychodynamic therapy, narrative therapy, Internal Family Systems, emotionally focused therapy, and others in treating ADHD. This will help establish an evidence base supporting the use of alternative modalities in adult ADHD treatment and perhaps encourage more clinicians who use these modalities to accept clients with ADHD.

Additional Supports. Research suggests that equipping individuals with ADHD with tools to cultivate self-compassion may be essential in reducing feelings of shame, self-criticism, and self-stigma (Luoma & Platt, 2015). An effective approach to fostering self-compassion and increasing the quality of life for individuals with ADHD may include helping them identify areas where they require support and embracing the idea that receiving support is entirely

acceptable. Though admitting the need for and accepting support can be challenging, psychotherapy can provide the optimal setting for this process. Psychologists can facilitate this practice by offering accommodations in therapy and accepting the areas in which their clients require these accommodations. By doing so, psychologists validate their clients' needs and provide a safe and accepting space for them to navigate the feelings that come up when accepting additional support.

The current study revealed that most (88.7%) participants reported offering at least one accommodation, such as appointment reminders, flexibility regarding late cancellations or no-shows, and phone check-ins as needed. However, it is concerning that over 11% of the participants reported not providing any additional support. This may be attributed to the traditional training approach emphasizing the client's responsibility for therapy sessions and progress, including remembering appointment times, punctuality, and completing homework (Kazantzis & Dattilio, 2010).

This philosophy, however, may not be as beneficial for neurodivergent populations, including individuals with ADHD. Individuals with ADHD face daily challenges that can evoke feelings of shame, guilt, and frustration, such as missing appointments, being late, forgetting daily tasks or homework, struggling to initiate or complete tasks, difficulty leaving the house, and difficulty retaining information (Koyuncu et al., 2018; Scheel et al., 2014). Research has shown that

minimizing shame can enhance individuals' capacity for learning and personal growth (Gilbert & Procter, 2006). Therefore, therapy must be a safe space where individuals can receive understanding and compassion when mistakes occur, ultimately providing clients with a corrective relational experience they may not receive anywhere else. Accommodations play a crucial role in this process, helping to meet individual needs and create an inclusive therapeutic environment.

On a positive note, this question also generated several valuable suggestions for additional support not previously identified in the literature or included in the survey. These included flexible scheduling and availability in therapy, assisting clients in adding appointments to their calendars while in the therapy office, emailing clients their homework after sessions, developing specific and actionable steps for clients to follow, tailoring homework and treatment plans to each client's individual needs, accommodating therapy-related assignments, providing written session recaps or takeaways, transitioning to remote sessions when necessary (e.g., if the client is late or forgets about a session), checking in with clients via email or text, offering access to online coaching communities, facilitating connections with other service providers, reducing homework assigned outside of sessions, and providing supplemental resources such as workbooks and applications.

These findings hold promise for the potential of developing resources for better supporting neurodivergent clients within the psychological community.

This group of professionals can also contribute valuable insights to training programs and future research initiatives. As such, a suggestion for future research would be to assess the effectiveness of accommodations in therapy with psychologists that already implement them. Such investigations can provide important guidance on best practices for psychologists in working with their clients and inform psychologists who have not yet implemented accommodations in their practice.

Topics in Therapy. Participants were asked to indicate how frequently they addressed various topics in therapy sessions with individuals with ADHD. The topics that trended toward being the most frequently discussed (i.e., often or very often) included executive functioning, emotion dysregulation, relationships, depression, and anxiety. This may suggest that individuals with ADHD often encounter challenges in these areas and highlights the importance of addressing these specific topics in therapy if not initially brought up by the client.

Though some therapists may hesitate to target executive functioning directly, incorporating executive functioning coaching within therapy sessions (rather than relying solely on external executive functioning coaches) may be necessary to facilitate rapid improvements and stabilize clients before delving into deeper issues. Psychologists can draw from and encourage clients to use supplemental resources (e.g., worksheets, books) designed for self-help to

enhance executive functioning and alleviate ADHD symptoms related to attention, hyperactivity, and impulsivity.

Regarding emotion dysregulation, the skills training component of DBT has been proven as a significant stand-alone intervention for emotion dysregulation in various clinical samples (Neacsiu et al., 2014). Although DBT training can be costly, time-consuming, and beyond the scope of practice for many psychologists, incorporating worksheets from the DBT skills manual can be highly beneficial for clients with ADHD, aiding in grounding techniques and self-regulation, ultimately expediting stabilization. Moreover, DBT skills can target posttraumatic and complex trauma symptoms commonly observed among individuals with ADHD (Adler et al., 2004; Ford & Connor, 2009; Rucklidge et al., 2006). Using DBT skills with ADHD clients can also help improve relationships (Robins & Chapman, 2004). As interpersonal connections, emotion regulation, and daily activities improve, it is anticipated that symptoms of anxiety and depression will alleviate as well.

Protocols From Participants Who Did Not Conduct Assessment

Participants who did not typically conduct psychological assessments in their practice were asked about their protocol when working with therapy clients who suspect they may have undiagnosed ADHD. Most participants reported utilizing an informal assessment (71.4%) process to explore the presence of ADHD symptoms, whereas others noted that they would engage in discussions

with their clients, expressing their suspicions and recommending a formal ADHD assessment. Additionally, some participants noted providing therapeutic techniques tailored to address ADHD symptoms and collaborating with their clients to foster acceptance of their neurodivergent status.

Further investigation into how therapists identify these symptoms in their clients would be valuable in determining whether some individuals may go undetected due to less apparent symptoms or potential overlap with other disorders. Understanding how therapists recognize and interpret ADHD symptoms can aid in improving detection rates and ensuring appropriate support for individuals who may not initially present with obvious signs of ADHD or whose symptoms overlap with other conditions.

Implications Regarding Participants' Beliefs About ADHD

Beliefs surrounding ADHD were explored with all participants who completed the survey. Findings indicated many correlations among individual beliefs, indicating that participants endorsing one misconception were likely to endorse other misconceptions and that participants endorsing one accurate belief were likely to endorse other accurate beliefs.

Encouragingly, there were a number of accurate beliefs that trended toward stronger endorsement. The following evidence-based statements trended toward higher levels of endorsement, on average: a combination of medication and psychotherapy is the most effective treatment for ADHD, ADHD is a disorder

that persists into adulthood, children diagnosed with ADHD can continue to be impaired by the disorder in adulthood, ADHD often co-occurs with other psychological disorders, ADHD is a hereditary condition, and ADHD is a neurological disorder. These findings imply that within Canada, there is a trend toward general knowledge about ADHD, suggesting a solid foundation that can be built upon for future training.

ADHD Should be Assessed and Treated by Individuals With Specialized Training in this Area of Psychology

Findings. There was a trend toward strong endorsement of the belief that ADHD should be assessed and treated by individuals with specialized training in this area of psychology. Further, the results from the binomial logistic regression showed this belief to significantly predict acceptance of adult ADHD assessment referrals.

Theory for Findings. These findings provide valuable insight into the ethical considerations that psychologists must navigate. Psychology professionals are typically trained to adhere to their area of expertise and be cautious about accepting referrals that fall outside the scope of their practice. Psychologists have an ethical duty to "carry out (without supervision) only those activities for which they have established their competence to carry them out to the benefit of others" (CPA, 2017, p. 19). On the other hand, it is also psychologists' duty to

> evaluate how their own experiences, attitudes, culture, beliefs, values, individual differences, specific training, external pressures, personal needs, and historical, economic, and political context might influence their interactions with and perceptions of others and integrate this awareness into their efforts to benefit and not harm others. (CPA, 2017, p. 20)

Psychologists have to walk the line of "do no harm" and thus determine how to act most ethically in the best interest of their clients. This involves recognizing their competencies and limitations, seeking ongoing professional development, and referring clients to colleagues with specialized expertise when necessary.

In most graduate-level psychology programs, ADHD continues to be presented as a childhood disorder. Therefore, graduate students in an adult stream of training will likely only have exposure to ADHD in the context of courses in school psychology, child psychopathology, or specialized assessment courses. This training may not be enough exposure to ADHD for individuals planning to work with adults, and these trainees are likely to graduate considering ADHD to be outside the scope of their practice.

Impact. Nevertheless, treating ADHD diagnosis as a specialized area of practice is likely one of the reasons that access to ADHD assessments is significantly limited for adults in Canada. The resulting impact is that the specialized clinics that do take on ADHD assessments are left with extensive waitlists and limited resources for follow-up appointments and continuity of care.

Recommendations. As the prevalence of ADHD continues to rise, it becomes increasingly crucial for assessing psychologists to be willing to take on these assessments. This may require that education about ADHD assessment be incorporated into the general stream of graduate training in psychology in the same way that most graduate students finish their programs with a comprehensive knowledge of how to assess anxiety and depression.

Education about ADHD should be integrated into graduate school programs as both an adult and childhood disorder so that clinicians are well-equipped when they leave school to recognize the signs, symptoms, and assessment procedures for this disorder. An emphasis on utilizing a comprehensive battery of questionnaires and only concise neuropsychological measures as necessary (e.g., CPT-3, IVA) should also be incorporated. Ideally, ADHD would also be integrated into advanced psychodiagnostic assessment courses, focusing on differential diagnosis between adult ADHD and other comorbid conditions (e.g., anxiety, depression, bipolar disorder).

ADHD is Overdiagnosed

Findings. The study found a neutral trend toward the belief that "ADHD is overdiagnosed." This could indicate apprehension or confusion among participants regarding this topic, or a general lack of accurate knowledge about this statistic. Additionally, this belief was found to be significantly higher in the

group of participants that did not specifically treat adult ADHD in their practice than the group that did.

Theory for Findings. Though research suggests a lack of evidence for systematic overdiagnosis of ADHD (Sciutto & Eisenberg, 2007) and extensive evidence for underdiagnosis and misdiagnosis (Barkley & Brown, 2008; Ginsberg et al., 2014; Manos et al., 2017), the common misconception that ADHD is overdiagnosed prevails. Some researchers suggest that this misconception is propelled by several factors, including the media and professional outdated literature (Sciutto & Eisenberg, 2007). Due to these conflicting sources of information, there is likely confusion and apprehension among the psychological community regarding the actual prevalence of ADHD.

Impact. Clinicians who still uphold or fail to deny this misconception may inadvertently cause harm by dismissing their clients' valid concerns and avoiding working on specific ADHD symptoms in therapy. They may view their clients' difficulties through a mental health lens and thus prioritize those symptoms instead. They may invalidate their clients' struggles by suggesting interventions that may not work for a neurodivergent brain (e.g., "You just need to learn to organize" or "You need to try harder to focus"). The literature supports this theory. A qualitative study investigated ADHD patients' experiences receiving care, with results overwhelmingly suggestive of skeptical attitudes toward ADHD by health professionals. Disbelief in the condition was thought to hinder access to

care, contributing to the “uphill battle” experienced by individuals with ADHD (Matheson et al., 2013). It is evident that clients can sense their healthcare professional’s dismissal of the disorder if not stated outright. This would inevitably hinder or even prove detrimental to clients’ progress, leading to self-stigmatization of the disorder, missed opportunities for psychoeducation and understanding of their symptoms, and neglect of crucial strategies that could significantly enhance their lives.

Recommendations. Accurate and up-to-date information about ADHD needs to be disseminated throughout the psychological and healthcare professional fields. Addressing this issue could begin with establishing comprehensive curricula in graduate school programs about ADHD and developing continuing education training programs for psychological professionals. This training could also benefit healthcare professionals in other fields (e.g., general practitioners, nurse practitioners, and psychiatrists). Disbelief, confusion, and misconceptions about ADHD must be put to an end for the benefit of the people who are struggling with this disorder and trying to receive help.

ADHD is Not a Real Disorder

Findings. Another key finding of this study was the significant and negative correlation between screening for ADHD in the initial intake and the belief that ADHD is not a real disorder. On the other hand, clinicians who held accurate beliefs, such as ADHD being a hereditary condition and a neurological

disorder, were more likely to screen for ADHD in the initial intake and work with specific ADHD treatments in therapy.

Theory for Findings. Despite ADHD's inclusion in the *DSM-5* and ICD-10 and the abundance of research highlighting the authentic challenges faced by individuals with ADHD, some researchers persist in debating or denying its existence. Along with the misconception that ADHD is overdiagnosed, this misconception seems to have been perpetuated by outdated research, societal stigmas surrounding ADHD, and media sensationalism.

Impact. The implications of these beliefs are significant, as they may misinform clinicians who lack comprehensive education on ADHD, potentially leading them to overlook or dismiss the need for ADHD screening in adult assessments.

Recommendations. This finding emphasizes the importance of promoting accurate beliefs among clinicians to safeguard against missed ADHD diagnoses. Continued education and training on the latest research as well as open dialogue about ADHD can help clinicians better understand the disorder and be more mindful of its presence when screening for psychological disorders.

It is More Difficult to Diagnose ADHD Than Other Psychological Disorders

Findings. The present study revealed a negative correlation between the belief that ADHD is more difficult to diagnose than other psychological conditions and screening for ADHD in the initial assessment. Additionally,

psychologists who did not accept child ADHD assessments endorsed significantly higher levels of this belief than those that did. Response frequencies for this belief were evenly distributed, indicating some ambiguity about this belief within the psychological community.

Theory for Findings. This finding is unsurprising as ADHD may initially appear difficult to diagnose. It is a heterogenous condition with a variety of symptoms, severity of presentation, and differences in presentation based on age. Further, many symptoms of ADHD overlap with other conditions, creating diagnostic complexities. For example, restlessness, a characteristic of ADHD (hyperactive/impulsive presentation), can also manifest in individuals with anxiety. Similarly, difficulties with motivation and cognitive impairment are shared by both individuals with depression and ADHD. Additionally, emotion dysregulation is observed in individuals with BPD and ADHD. The list goes on. Fear of misdiagnosis is a legitimate concern for psychologists. Screening for ADHD could result in having to investigate the diagnosis further, and therefore psychologists may feel better off avoiding it altogether. This fear may also be exacerbated by the prevalent belief that "ADHD is overdiagnosed" as psychologists may be apprehensive about unintentionally contributing to an already perceived issue.

The anxiety surrounding misdiagnosis may be even more pronounced when working with children. Because ADHD is a life-long diagnosis, that

misdiagnosis could profoundly affect a child's well-being. The potential consequences include unnecessary medication usage, stigmatization by parents and teachers, and the child identifying with a disorder that may not be accurate. The stakes may simply be perceived as higher.

On the other hand, the belief that ADHD is more difficult to diagnose than other psychological disorders is largely unfounded. The guidelines on ADHD diagnosis are well-documented in the literature, outlined in well-known ADHD associations (e.g., CADDRA), and present in the most commonly used diagnostic manuals (i.e., *DSM-5-TR*/ICD-10). Additionally, various screening tools and rating scales are widely available for psychologist use. Experts in the field have published countless articles, books, podcasts, and checklists on ADHD. There are ADHD conferences each year worldwide. Given the plethora of resources, there is no reason that ADHD should be gate-kept by "experts" in the field and seen as more challenging to diagnose than other conditions.

Impact. The current findings highlight the impact of this belief. Psychologists with this belief are less likely to screen for ADHD in their assessment intakes and to accept child ADHD assessment referrals. By not screening for ADHD, psychologists may miss crucial information and overlook a vital part of the diagnostic picture. This omission can lead to an incomplete understanding of the client's challenges, potentially resulting in misguided treatment plans and delayed interventions. Those declining child ADHD

assessment referrals are likely deferring to "specialists," resulting in increased waitlists and delays in diagnosis and treatment. Additionally, declining these assessments may lead to missed opportunities for diagnosis in childhood, thus leading to an increased need for assessment in adulthood.

Recommendations. This finding highlights the importance of incorporating comprehensive training at the graduate level, specifically emphasizing differential diagnosis of ADHD from other psychological conditions. Further, future research may benefit from mapping out the psychological profile of individuals with ADHD to assist with conceptualization and diagnostic procedures. With proper training from the onset, ADHD should be seen as a disorder that has clear diagnostic guidelines and that can be assessed by most generally trained psychologists.

It is Difficult to Treat Individuals With ADHD

Findings. The belief that it is difficult to treat individuals with ADHD was significantly and negatively correlated with screening for ADHD in an initial assessment intake. This belief was also significantly higher in the group that did not specifically treat adult ADHD in their practice than the group that did. Response frequencies for this belief were evenly distributed, indicating some ambiguity about this within the psychological community.

Theory for Findings. There are several reasons why psychologists may avoid working directly with a disorder they perceive as difficult to treat. One of

the reasons involves factors that were found to impact job satisfaction in healthcare professionals: mastery and achievement (Manojlovich & Spence Laschinger, 2002). Although studies have not been directly done with psychologists, psychologists are also considered to be motivated by their patients' success rates. Concern over being unable to achieve success due to a lack of understanding of the disorder may cause deterrence toward working with ADHD. Psychologists may also fear frustration, emotional exhaustion, and burnout. Furthermore, the ever-present anxiety around ethics and working outside the scope of practice may be looming. In summary, this finding also likely represents problems with prior training and familiarity with ADHD, leading to a lack of screening for ADHD and refusal to work specifically with ADHD symptoms.

Impact. Psychologists taking on therapy clients with ADHD without working on their ADHD symptoms specifically lead to adverse outcomes. Clients may perceive that their unique challenges related to ADHD are being overlooked or dismissed, leading to frustration and despair. Furthermore, this approach may inadvertently mislead clients in their coping strategies, preventing them from effectively managing their ADHD symptoms. Though short-term progress may be observed, clients may eventually fall back into patterns associated with ADHD, hindering their long-term well-being and progress.

Recommendations. There is substantial evidence for the effectiveness of various psychotherapeutic modalities in treating adult ADHD. As discussed in

previous sections, various studies have published evidence for using DBT, ACT, and mindfulness training in working with ADHD symptoms. Various experts in the field have published books, videos, and resources for executive functioning strategies that work with ADHD. Therefore, it is recommended that in providing graduate-level training and continuing education training on ADHD, education around effective modalities and strategies be incorporated into these curricula. Equipping clinicians with a deeper understanding of ADHD's nature, developmental trajectory, and available treatments could help them perceive ADHD as less daunting and, ultimately, approach its treatment with greater confidence.

Most Adults Seeking Assessment for ADHD are Malingering to Receive Stimulant Medication

Finding. The belief that most adults seeking assessment for ADHD are malingering to receive stimulant medication was significantly higher in the group that did not accept adult ADHD therapy referrals than the group that did. Additionally, this belief negatively predicted the acceptance of adult ADHD assessment referrals and specific treatment for ADHD symptoms.

Theory for Finding. In conjunction with the perceived challenges of diagnosing ADHD compared to other psychological disorders, this finding suggests that clinicians may feel demotivated in attempting these assessments due to fear of making an incorrect diagnosis. This finding adds to the existing

literature, suggesting that apprehension surrounding malingering is a deterrent when it comes to engaging in ADHD assessments (Sciutto, 2013).

Impact. These findings demonstrate the impact of apprehensions and fears on the decision-making process regarding adult ADHD assessments. In conjunction with previous literature, the belief in malingering decreases the likelihood of psychologists providing assessment and treatment services to adults with ADHD. Research suggests that clients sense this apprehension as well, often feeling stigmatized or misunderstood by their healthcare professionals, and sometimes preventing them from seeking help (Matheson et al., 2013).

Recommendations. This finding highlights the need to address these apprehensions through future research, education, and training. Although a multitude of studies have demonstrated that it can be easy to fake symptoms of ADHD (DeRight, 2021), there exists no research on actual malingering practices to obtain stimulant medication in adults beyond the college age. Studies on malingering beyond the college age are therefore necessary.

Moreover, although there are guidelines for psychologists on detecting malingering (Harrison, 2004), no current validated measures exist for this specific purpose. The development of such a tool may be beneficial in helping psychologists feel more confident in working with adult ADHD.

Finally, with proper education and training, psychologists can better understand the disorder and feel equipped with the knowledge and skills to detect and differentiate genuine cases from potential malingering attempts.

ADHD Does Not Occur in Individuals With Higher-Than-Average Intelligence

Findings. A significant negative predictor of working with specific ADHD symptoms in therapy was the misconception that ADHD does not occur in individuals with higher-than-average intelligence. This belief was notably higher in psychologists who did not work with specific ADHD symptoms than those who did.

Theory for Findings. Although research consistently supports the notion that intelligence is unrelated to ADHD and that lower IQ does not account for the cognitive impairments observed in ADHD (Wood et al., 2011), the misconception that ADHD does not occur in individuals with higher-than-average intelligence continues to persist. This belief may be partly influenced by older literature, such as a 2004 study by Frazier et al., suggesting that individuals with ADHD typically score lower on IQ tests than non-ADHD controls. However, this study should be interpreted with caution as it measured overall intellectual ability (i.e., Full-Scale Intelligent Quotient [FSIQ]) rather than using a measure such as the General Ability Index (GAI) that would exclude common deficits associated with ADHD such as working memory and processing speed. Studies such as these may nevertheless perpetuate the misconception that ADHD does not occur in

individuals with higher-than-average intelligence. Research also suggests that ADHD may be overlooked in clients with higher-than-average intelligence due to intelligent individuals employing compensatory strategies to cope with their symptoms, effectively masking the typical signs of ADHD (Rommelse et al., 2016).

Impact. Both theories highlight a lack of understanding of ADHD and a misunderstanding of its diverse manifestations and challenges. By subscribing to blanket statements about intelligence in the context of ADHD, clinicians may inadvertently neglect to address specific ADHD symptoms, instead focusing solely on their clients' general mental health concerns. Some clinicians may overlook or deny their clients' ADHD altogether in treatment, resulting in inappropriate treatment of their overall issues and leading to continued struggles and missed opportunities for treatment.

Recommendations. This finding again emphasizes the urgent need for an improved understanding of ADHD within the psychological community. Education and awareness campaigns that dispel misconceptions about ADHD's relationship with intelligence are essential, especially within the psychological and healthcare professions. In graduate school curricula, there should be an emphasis placed on the heterogeneity of ADHD and its potential occurrence in individuals with diverse cognitive abilities.

The Role of Accurate Beliefs

The current study found that individuals who accepted child ADHD assessment referrals, adult ADHD therapy referrals, and worked with adult ADHD in their practice were significantly more likely to hold accurate beliefs about ADHD. For example, the belief that emotion dysregulation is a core feature of ADHD was significantly higher among psychologists that accepted child ADHD assessment referrals than those that did not. Research on emotion dysregulation and ADHD has only begun emerging in recent decades. Therefore, individuals actively engaged in ADHD-related work are more likely to possess updated knowledge, impacting their willingness to work with the disorder.

Furthermore, participants who accepted child ADHD assessment referrals and worked with ADHD symptoms in therapy demonstrated a higher belief in ADHD as a hereditary condition. This suggests that acknowledging the genetic component of ADHD might play a crucial role in psychologists' comfort in assessing and working therapeutically with the condition.

Similarly, the belief that ADHD is a neurological disorder was notably higher among professionals specifically treating ADHD symptoms in their practice. This emphasizes the importance of recognizing ADHD's neurobiological underpinnings when working therapeutically with adult ADHD clients.

Overall, these findings highlight that accurate beliefs about ADHD in psychology promote more engagement in assessment and treatment practices. For

psychologists that do not currently work with ADHD, these results signal the potential for growth through training and continuing education—an important factor in increasing the support available for individuals affected by the condition.

Implications for Training

Findings from this study strongly suggest that misconceptions about ADHD may arise from a lack of adequate training. The results revealed a significant and negative correlation between training level and level of endorsement of misconceptions associated with ADHD, such as "ADHD is overdiagnosed," "It is difficult to treat individuals with ADHD," "Stimulant therapy for ADHD creates a risk for later substance abuse," "It is more difficult to diagnose ADHD than other psychological disorders," "Dietary changes can treat ADHD symptoms," and "Stimulant medications do not benefits adults with ADHD."

On the other hand, the current study also revealed that more than half of the participants reported being trained in ADHD and feeling competent in working with the diagnosis. Training level was positively correlated with several evidence-based statements regarding ADHD, including that a combination of medication and psychotherapy is the most effective treatment for ADHD, that children diagnosed with ADHD can continue to be impaired by the disorder in adulthood, that ADHD is a hereditary condition, and that ADHD is a neurological disorder. Therefore, individuals who reported receiving more training in ADHD

held lower levels of misconceptions and higher levels of accurate beliefs. These findings align with previous literature, emphasizing training as a protective factor against misconceptions.

Another notable finding from this study was that training levels were significantly higher for participants who accepted child and adult ADHD assessment referrals and worked with specific ADHD symptoms in therapy. Moreover, training was significantly and positively correlated with screening for ADHD in the initial assessment intake. Training also emerged as a significant predictor for accepting adult ADHD assessment referrals and delivering treatment for specific ADHD symptoms.

Overall, these results underscore the critical role of education and training in dispelling misconceptions and promoting evidence-based practices for ADHD. Ensuring that all practitioners, regardless of specialty, receive comprehensive training in ADHD is essential for several reasons. Firstly, it helps prevent the inadvertent transmission of stigmas and biases about ADHD to clients. Misinformation and stigmatization can lead to negative perceptions and attitudes toward ADHD, hindering clients from seeking help and receiving appropriate support.

Secondly, well-informed practitioners can play a crucial role in countering the spread of misinformation about ADHD among their clients and colleagues. By providing accurate information and dispelling myths, they contribute to a more

informed and understanding community surrounding ADHD. Thirdly, proper education equips practitioners to recognize the diverse presentations of ADHD and avoid overlooking the condition in clients who may not fit the stereotypical profile. Early detection and diagnosis of ADHD are vital for initiating timely interventions that can significantly improve clients' well-being and quality of life. Furthermore, training in evidence-based practices ensures that practitioners are equipped with the most effective and up-to-date approaches for assessing and treating ADHD. This leads to better treatment outcomes and overall client satisfaction.

Taken together, the findings align with the literature that suggests that training, awareness, experience, knowledge and understanding, and confidence in working with ADHD are all predictors of positive care experiences for clients across areas of referral, diagnosis, and treatment (Faraone et al., 2004).

Limitations

This study had several potential limitations that may have impacted the results and overall findings.

Though using an internet survey design in this study offered several advantages, it prevented control over the participant pool, which may have affected the accuracy and reliability of the responses. Although measures were taken to minimize potential issues, such as flagging multiple responses from the same individual and detecting and preventing bot responses using Qualtrics

technology, there remains the possibility of response biases due to the uncontrolled nature of participant recruitment.

The sample was considered to be limited to individuals who were internet users, as the study was only conducted online. This exclusion may have introduced a potential bias in the sample, as psychologists who are not internet users may have different characteristics or perspectives not captured in the study.

There is a potential that participants who that feared negative repercussions with their college of registration may not have answered honestly. Despite the anonymity of their answers, the fear of violating ethical codes and professional responsibilities within the psychological community may have led some participants to withhold or provide biased responses, impacting the accuracy and validity of the data.

The survey was conducted in English, potentially excluding individuals who are not fluent in the language. Therefore, there was a likely bias toward English-speaking participants, particularly in French-speaking regions such as Quebec. This may have limited the representation of perspectives and experiences from French-speaking areas, impacting the generalizability of the findings. Moreover, participants who overestimated their English proficiency may have encountered difficulties comprehending and responding to the questionnaire, introducing potential inaccuracies in their responses.

Using a researcher-generated scale to assess beliefs limited the use and applicability of the scale in the study. Though this scale did primarily draw upon past research, it has not been psychometrically validated, and therefore its reliability and validity are unknown. Unfortunately, no published scales on beliefs regarding ADHD were available when the questionnaire was generated. Consequently, this limitation has potential drawbacks, such as inadequate item coverage, restricted perspectives, and biases. As a result, some critical findings may have been missed, and the study should not be considered to capture all potential biases and beliefs associated with ADHD assessment and treatment. Future research may derive value from establishing and validating a scale that focuses on the stigma surrounding ADHD to identify if any additional correlations exist.

The findings discussed imply causation where correlation was found, particularly regarding beliefs about ADHD. The researcher inferred directionality based on insights from previous studies, but this approach remains subject to potential biases and limitations. It is plausible that mediating factors, such as the level of training among clinicians, could influence the observed correlations and help explain certain findings. However, without further research, whether these mediating factors play a significant role in the observed associations remains uncertain.

There are statistical limitations of using the Mann-Whitney U test. Typically, non-parametric tests such as the Mann-Whitney have less statistical power than parametric tests, meaning that some differences between the two groups may not have been identified (Whitley & Ball, 2002).

The possibility of selection bias is considered to be a significant limitation (Mathy et al., 2003). Participants who have a specific interest or passion for working with ADHD may have been more inclined to respond to the questionnaire compared to psychologists who do not share the same level of interest. Additionally, posting the survey on platforms dedicated to ADHD, such as the CADDAC website, may have attracted psychologists who already had a preexisting interest in the field. Despite efforts to emphasize that working with adult ADHD was not a requirement for participation, a significant selection bias effect was likely to have occurred, which may have inflated the overall proportion of individuals who reported assessing and treating adult ADHD, providing an overestimation of this amount in Canada. This suggests that the survey sample may not fully represent the general population of psychologists in Canada, potentially limiting the generalizability of the findings.

Future Directions: Training Program Suggestions

Despite a significant proportion of participants reporting that they had previously received some level of training on ADHD, the majority expressed interest in additional training. This indicates that clinicians may have uncertainties

about their current competence in working with ADHD, received training when research on adults was less extensive, or desire updated knowledge based on the latest literature. The substantial interest in attending various types of training programs, ranging from short sessions to comprehensive multi-day trainings, highlights the need for frequent training programs on ADHD to enhance skills and stay informed about advancements in the field.

Based on these findings, this writer proposes pilot training programs targeting clinical psychologists who work with adults. The suggested program offers different levels of training to cater to various needs and levels of prior knowledge and experience, as requested by participants in this study.

The “Introduction to Adult ADHD” session, approximately 2 hours, is proposed for clinicians who lack any training in ADHD or feel that their training does not extend beyond basic knowledge. This session covers fundamental topics such as understanding adult ADHD, diagnostic criteria specific to adults, differentiating adult ADHD from child ADHD, and debunking myths and stigmas. Resources for both clinicians and clients are also be provided. This session would be an introductory course to the other programs, allowing clinicians to gain initial exposure and evaluate their interest in further training.

The “Adult ADHD- Beyond the Basics” course, ranging from a half day to a full day, is proposed for clinicians who feel somewhat competent in ADHD but want to expand their knowledge and stay current with the latest research and

resources. This course would delve deeper into *DSM-5-TR* criteria, new research findings, updated resources and technologies, and further debunking myths and stigmas. It would also emphasize the identification of signs and symptoms associated with adult ADHD.

The "Comprehensive Adult ADHD Training Program" would span several days and cater to clinicians who lack any training in adult ADHD, feel their training is inadequate, or lack confidence in working with adult ADHD. This program would begin by covering a wide range of topics, including an in-depth understanding of adult ADHD, debunking myths and stigmas, diagnostic criteria beyond the *DSM-5*, differentiation from child ADHD, identification of signs and symptoms, comorbidities, and useful resources for clinicians and clients. Further sessions would include assessment and treatment training. The assessment training would cover diagnostic criteria, differential diagnosis, best practices in assessing adult ADHD, appropriate assessment measures, assessment protocols such as reports, feedback, psychoeducation, and coordinating clients with other supports. A portion of this session would also focus on best practices for remote assessment of adult ADHD. The therapy training portion would cover research on evidence-based modalities and incorporating skills from these modalities into practice, important topics to discuss during therapy sessions, research on neurodivergent-affirming therapy, and accommodations for therapy clients.

All sessions would be recorded so that they could be viewed by individuals in different time zones and with varying schedules.

Future Directions: Research

The current study collected extensive data on the practices of psychologists in Canada in diagnosing and treating adult ADHD. Though this study was limited to certain methods and analyses, the data collected and the insights gained could open the door for several other research studies. Building upon the data collected in this study, future research could explore various factors that may impact assessment and training practices in working with adult ADHD. These factors may include cultural influences, provincial differences in training requirements, the length of time psychologists have been registered and practising, specialized areas of clinical training, educational attainment (master's vs. doctoral-level clinicians), and the influence of current or prior workplace settings.

Another area of investigation could focus on how participants' beliefs impact the use of accommodations for individuals with adult ADHD. Understanding the relationship between clinicians' beliefs and their utilization of accommodations in assessment and treatment could provide insight into how to generate buy-in from clinicians in using accommodations.

There is a gap in the literature on psychology training programs in relation to adult ADHD. Further research could investigate how graduate programs teach

ADHD, the emphasis placed on it as a childhood disorder, and how prepared graduate students feel to diagnose and treat adult ADHD after completing their studies. This research could help determine whether changes to policies from provincial regulatory bodies in psychology might be needed.

Additionally, it would be valuable to examine how different treatment modalities impact treatment outcomes of specific issues in adult ADHD (e.g., executive dysfunction, emotion dysregulation, relationships, and comorbid diagnoses). Expanding the research on treatment modalities beyond the current commonly studied approaches (e.g., CBT, DBT, ACT) would also be beneficial. Investigating the efficacy of psychodynamic, narrative, Internal Family Systems, humanistic, and emotionally focused therapy, among others, in working with adult ADHD is necessary given the number of participants who reported using these modalities with their adult ADHD clients. By conducting research in these areas, a more comprehensive understanding of treatment options can be established, allowing clinicians to tailor their approaches to better meet the needs of their clients.

Furthermore, considering the increasing prevalence of remote work and its benefits for individuals who face barriers to accessing in-person resources, research into remote assessment and therapy for adults with ADHD is crucial. While guidelines for best practices in remote assessment of adult ADHD exist, further research is needed to examine the psychometric properties of remote

administration of certain measures (e.g., IVA-2). Establishing an evidence base for remote assessment and therapy can encourage practitioners to adopt these practices, increasing the availability of services for individuals who face geographical, logistical, or other challenges in accessing in-person care. This can also expand the pool of practitioners willing to conduct adult ADHD assessments, particularly those who are registered in multiple provinces and can provide services remotely across the country. This would be particularly advantageous for provinces with few psychologists, such as Nunavut and Prince Edward Island, where access to specialized services may be limited (Statistics Canada, 2021).

Future Directions: Policy Change

In Canada, graduate programs in psychology are generally designed to align with provincial accrediting bodies. For instance, institutions in British Columbia adhere to guidelines set forth by the College of Psychologists of British Columbia (CPBC). In their guidelines for applicants, the CPBC (2023) delineates coursework requirements including,

> Biological Bases of Behaviour (physiological psychology, comparative psychology, neuropsychology, sensation and perception, or psychopharmacology); Cognitive/Affective Bases of Behaviour (learning, cognition, motivation, or emotion); Individual differences (personality theory, human development, abnormal, psychopathology); Professional practice: assessment (application of assessment techniques); Professional

> practice: intervention (application and theory of psychotherapy, counselling, behaviour modification) [among other subjects]. (para. 1)

However, it is noteworthy that these guidelines do not specifically emphasize the particular disorders that must be addressed within each course. Based on personal observations during graduate studies, ADHD received comparatively less attention than other disorders, such as anxiety and depression, despite similar or even higher prevalence of ADHD in adulthood (Javaid et al., 2023; World Health Organization, 2017, 2023). Though this observation is anecdotal in nature, it raises the need for future research to determine if this pattern is prevalent across all Canadian graduate psychology programs.

In the current study, 20% of the participants reported either lacking any formal training in ADHD or not feeling inadequately prepared to work with ADHD despite having received previous training. One possible theory for this occurrence is that graduates are emerging from psychology programs having received limited instruction on ADHD in their academic curriculum. Though other disorders of adulthood, such as anxiety and depression, are typically taught comprehensively and across various courses, such as biological bases of behaviour, individual differences, assessment, and intervention, it is unclear whether ADHD is covered to a similar extent.

The implications of the study's findings underscore the importance of training in predicting willingness to assess and treat ADHD and reducing

misconceptions surrounding the disorder. Regulatory bodies overseeing graduate psychology programs across Canada may be part of the solution by implementing policy changes concerning graduate school curricula. This may include establishing more stringent guidelines regarding disorders that should be covered in various courses and conducting evaluations of programs to ensure the inclusion of ADHD as a disorder of adulthood.

Conclusion

The current study collected data on the practices of psychologists in Canada on the assessment and treatment of adult ADHD, as well as factors that may limit services for individuals with ADHD in the country. Overall, the results of the current research are consistent with the findings of previous studies and support the research questions: Stigmatizing beliefs, feelings of incompetence, and lack of prior training are among the main factors that are predictive of reluctance toward working with adult ADHD, particularly in accepting treatment referrals and working with specific ADHD symptoms.

Given these findings, there is an evident need for developing and implementing a comprehensive training program on adult ADHD targeting psychologists nationwide. This program should not only cater to current practitioners but also be integrated into graduate school programs across the country. The current paper provided an outline of topics that could be the focus of

the training program, which future research could focus on piloting and assessing to determine effectiveness.

Furthermore, future research should focus on several areas of adult ADHD, including establishing a psychological profile and an integrated assessment tool, developing therapeutic modalities, investigating malingering in adult assessments beyond the college age, investigating the use of accommodations in therapy, developing best practices for remote ADHD assessment, and developing brief and remote neuropsychological tools for assessments.

In conclusion, it is the hope that with additional training and education for psychologists, as well as further research in this area, there will be a positive impact on the quality of care and an increase in the number of clinicians willing and able to work with adults with ADHD. It is the goal that individuals with ADHD will eventually experience timely care, reduced barriers, diminished stigma, streamlined follow-ups, and enhanced overall support, ultimately leading to symptom reduction, therapeutic gains, and improvement in quality of life.

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Appendix A: Additional Figures and Tables

Figure A1

DSM-5 ADHD Criteria for Adults

<table>
<tr><th>Inattentive Type</th><th>Hyperactive/Impulsive Type</th></tr>
<tr><td colspan="2">Five or more symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities.

Note: The symptoms are not solely a manifestation of oppositional behaviour, defiance, hostility, or failure to understand tasks or instructions.</td></tr>
<tr><td>a. Often fails to give close attention to details or makes careless mistakes.
b. Often has difficulty sustaining attention in tasks or play activities.
c. Often does not seem to listen when spoken to directly.
d. Often does not follow through on instructions and fails to finish schoolwork, chores, or workplace duties.
e. Often has difficulty organizing tasks and activities.
f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort.
g. Often loses things necessary for tasks or activities.
h. Is often easily distracted by extraneous stimuli.
i. Is often forgetful in daily activities.</td><td>a. Often fidgets with or taps hands or feet or squirms in seat.
b. Often leaves seat in situations when remaining seated is expected.
c. Often runs about or climbs in situations where it is inappropriate (in adults, may be limited to feeling restless)
d. Often unable to play or engage in leisure activities quietly.
e. Is often “on the go,” acting as if “driven by a motor.”
f. Often talks excessively.
g. Often blurts out an answer before a question has been completed.
h. Often has difficulty waiting their turn.
i. Often interrupts or intrudes on others.</td></tr>
<tr><td colspan="2">Additional Requirements for Diagnosis
Several symptoms were present prior to age 12 years.
Several symptoms present in two or more setting.
There is clear evidence that the symptoms interfere with, or reduce the quality of, social, academic, or occupational functioning.
Symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better explained by another mental</td></tr>
</table>

disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, personality disorder, substance intoxication or withdrawal.)

Symptoms may be classified as mild, moderate, or severe based on symptom severity.

Table A1

Adult ADHD Assessment Measures

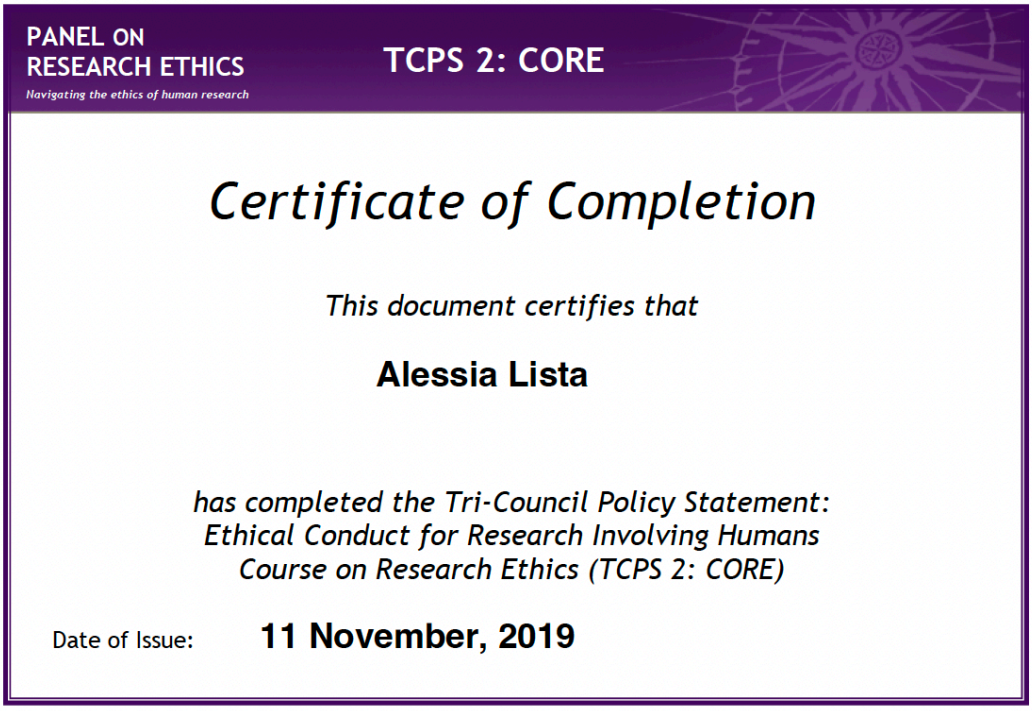
Scale	Description	Source
Adult ADHD Self-Report Scale (ASRS)	Self-administered screening tool used to identify symptoms of ADHD in adults. Consists of 18 questions based on the DSM-5 criteria for ADHD.	CADDRA
WEISS Symptom Record II	Self-report questionnaire designed to assess symptoms related to ADHD in adults. Consists of 72 items that assess nine different symptom domains including attention, hyperactivity, emotion dysregulation, cognitive problems, and organizational difficulties. Designed to be completed by the client, family member, or close friend.	CADDRA
WEISS Functional Impairment Rating Scale – Self (WFIRS-S)	Self-report questionnaire designed to assess the functional impairment of adults with ADHD. Consists of 50 items that assess six different domains of functional impairment, including family relationships, social activities, performance at work or school, self-concept, and risky activities. Designed to be completed by clients themselves.	CADDRA
Brown Attention-Deficit Disorder Rating Scale for Adults (BADDS)	Questionnaire that consists of 40 items assessing five symptom domains of attention and executive functioning	Adler et al. (2015)

	including working memory, time management, organization, and emotion regulation.	
Conners Adult ADHD Rating Scales (CAARS)	Questionnaire that assesses symptoms of both inattention and hyperactivity/impulsivity, as well as related features such as anxiety, depression, and executive dysfunction. Consists of several different forms, including self-report, observer report, and clinician-administered forms.	Adler et al. (2015)
CADDRA ADHD Assessment Form	Questionnaire that includes a clinical interview, symptom checklist, and self/observer rating scales. Also includes a review of medical history and documentation of any comorbid conditions or medications. Provides an evaluation of symptoms and co-existing conditions that may impact diagnosis and treatment.	CADDRA
Behaviour Rating Inventory of Executive Functioning (BRIEF) – Adult Version	Self- and observer-report measure used to assess executive functioning in adults. Consists of 73 items assessing various areas of executive functioning including inhibition, planning and organization, shifting, emotional control, task monitoring, and organization of materials.	Fuermaier et al. (2019)
WAIS-IV	A standardized intelligence test used to measure cognitive abilities in adults aged 16 to 90 years old. Assesses four	Rosso et al. (2023); Theiling & Petermann (2016)

	areas of cognitive functioning, including verbal comprehension, perceptual reasoning, working memory, and processing speed. Research has found that adults with ADHD often demonstrate weaknesses in working memory and processing speed.	
Delis-Kaplan Executive Function System (DKEFS)	A standardized neuropsychological assessment tool designed to evaluate the executive functioning of individuals aged 8 to 89 years old. Assesses various cognitive domains related to executive functioning, including flexibility of thinking, problem-solving, attentional control, and inhibition.	Rosso et al. (2023)
Conners Continuous Performance Task (CPT)	A computer-based neuropsychological test designed to assess attentional and inhibitory control. Requires individuals to respond to a specific target stimulus (e.g., pressing a button when a certain letter appears on the screen) while inhibiting responses to other stimuli. This test also provides measures of performance accuracy and reaction time.	Rosso et al. (2023)

Note. Adapted from ADHD diagnostic and symptom assessment scales for adults by Adler, L., Shaw, D. & Alperin, S, 2015, *Attention-Deficit Hyperactivity Disorder in Adults and Children,* pp. 224-232 (https://doi:10.1017/CBO9781139035491.019). Copyright 2015 by Cambridge University Press.

Appendix B: TCPS Certificate of Completion



PANEL ON RESEARCH ETHICS
Navigating the ethics of human research

TCPS 2: CORE

Certificate of Completion

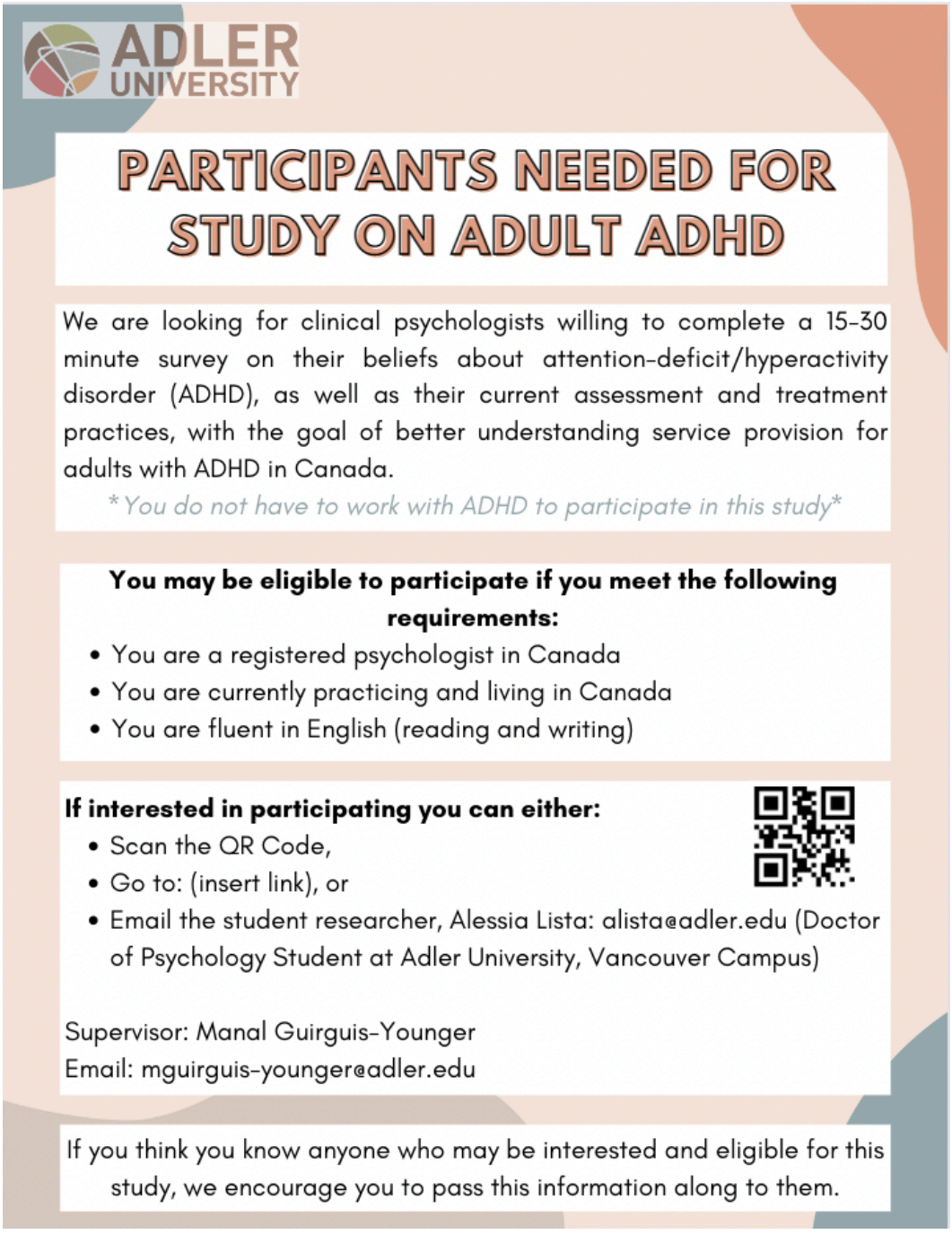
This document certifies that

Alessia Lista

has completed the Tri-Council Policy Statement:
Ethical Conduct for Research Involving Humans
Course on Research Ethics (TCPS 2: CORE)

Date of Issue: **11 November, 2019**

Appendix C: Recruitment Poster



Appendix D: Recruitment Email to Psychologists and Private Practices for Participation

Dear [psychologist's name/private practice],

My name is Alessia Lista, and I am a doctoral student in clinical psychology at Adler University in Vancouver, British Columbia. I am conducting research on psychologists' practices in the assessment and treatment of adult attention-deficit/hyperactivity disorder (ADHD) in Canada. This study will aim at understanding psychologists' beliefs and knowledge about adult ADHD and practices in the assessment and treatment of these individuals. It will also explore the potential for future training in this area.

I am currently inviting people to participate in this study. You may be eligible if you meet the following requirements:

- You are a registered psychologist in Canada
- You are currently practicing and living in Canada
- You are fluent in English (reading and writing)

If you are interested in participating and meet the above requirements, click here: www.tinyurl.com/adultadhdstudy or view the attached poster. Your participation in this research will involve completing a 15–30-minute survey. Your participation is completely voluntary. Should you participate, your answers will be anonymous and confidential. You will also have the option of receiving a link to the summary of results once the research is completed. Please feel free to pass along this email to other colleagues as well.

Please contact me using the information below if you have any questions. Thank you for your time and consideration.

Student Researcher: Alessia Lista
Email: **alista@adler.edu**
Program: Doctor of Clinical Psychology

Research Advisor: Dr. Manal Guirguis-Younger
Email: **mguirguis-younger@adler.edu**

Best,

Alessia Lista

PsyD Student Researcher
Adler University (Vancouver Campus)
alista@adler.edu

Appendix E: Submission to Canadian Psychological Association (CPA)

Recruit Research Participants Portal (R2P2)

Name: Alessia Lista
Email: **alista@adler.edu**
Phone number: 416-660-0424

Research Information

Title: Adult ADHD: A Survey of Current Practices in Psychology

Description of Study: This study will be exploring the provision of psychological care for adults with attention-deficit/hyperactivity disorder (ADHD) across Canada. It will aim at understanding psychologists' beliefs and knowledge about adult ADHD and practices in the assessment and treatment of these individuals. It will also explore the potential for future training in this area.

Study Population: Registered psychologists in Canada. Individuals must meet the following criteria to participate:

- They are a registered psychologist in Canada
- They are currently practicing and living in Canada
- They are fluent in English (reading and writing)

Participant Obligation: Participants will be asked to complete a 15–30-minute survey about their current practices in assessing and treating adult ADHD, as well as their interest in future training.

Location of Study: Online – Vancouver

Link to Study Website: TBD

Study Period: TBD

Primary Researcher: Alessia Lista (student)
Supervisor: Manal Guirguis-Younger, PsyD, R.Psych

Appendix F: Posting for Facebook and LinkedIn

Hello Friends and Colleagues,

Hi!

I am conducting research on adult attention-deficit/hyperactivity disorder (ADHD) as part of my doctoral degree in psychology (PsyD) at Adler University Vancouver Campus. This study will aim at understanding psychologists' beliefs and knowledge about adult ADHD and practices in the assessment and treatment of these individuals. It will also explore the potential for future training in this area.

I am looking for participants for this study and am recruiting registered psychologists in all provinces in Canada. Participation will involve completing a 15-30-minute online survey. If you are interested in participating, please go to: www.tinyurl.com/adultadhdstudy , or scan the QR code to access the survey.

If you think you know anyone else that may be interested and eligible for this study, please share this information with them.

If you have any questions, please feel free to email me at the email included in the poster.

Thank you!

Alessia Lista
PsyD Student Researcher
Adler University (Vancouver Campus)

Appendix G: Follow-Up Email to Psychologists and Private Practices

Good afternoon,

I hope this email finds you well. I am following up on my previous email regarding a study I am conducting on adult attention-deficit/hyperactivity disorder (ADHD). This is a friendly reminder to those who have not completed the survey that it will be available until January 30, 2023. If you have already completed the survey, thank you kindly for your time.

For more information or to start the survey, view the attached poster, or click the following link: www.tinyurl.com/adultadhdstudy

Best,

Alessia Lista
PsyD Student Researcher
Adler University (Vancouver Campus)
alista@adler.edu

Appendix H: Information Landing Page for Participants

Thank you for your interest in this study. We are interested in knowing more about psychologists' practices in the assessment and treatment of adults with ADHD in Canada. This study will aim at understanding psychologists' beliefs and knowledge about adult ADHD and practices in the assessment and treatment of these individuals. It will also explore the potential for future training in this area.

To determine whether you meet criteria for this study, you will first be directed to a brief screener.

If you would like to continue, please click "next" to begin the survey.

Appendix I: Screening Questions

The following information is for screening purposes only. These questions will determine if you fit the study criteria:

1. I am a registered psychologist in Canada.
   - ☐ Yes [go to next question]
   - ☐ No [skip to closing page]

2. I am currently practicing and living in Canada:
   - ☐ Yes [go to next question]
   - ☐ No [skip to closing page]

3. I am fluent in English (reading and writing):
   - ☐ Yes [go to next question]
   - ☐ No [skip to closing page]

[Click next]
If the participant meets screening requirements, they will be directed to the informed consent page.

If the participant does not meet screening requirements, they will see:
Thank you for your interest in this study. Your responses do not meet the requirement for our criteria at this time. We appreciate your time and participation.

Appendix J: Informed Consent Form

INFORMED CONSENT

ADULT ADHD: A SURVEY OF CURRENT PRACTICES IN PSYCHOLOGY

The Researchers

My name is Alessia Lista. I am doing this research as a part of my doctoral degree in the Doctor of Psychology Program (Psy.D) at Adler University (Vancouver Campus).

If you have any questions about the research, you can contact me or my Supervising Faculty. Our contact information is below:

Student Researcher: Alessia Lista E-mail: alista@adler.edu

Supervising Faculty: Dr. Manal Guirguis-Younger Program: PsyD
Phone #: 236-521-2495 Email: mguirguis-younger@adler.edu

The Adler University (Vancouver Campus) Research Ethics Board (REB) has approved this research.

This Research

This research focuses on the current practices of psychologists in Canada around adult attention-deficit/hyperactivity disorder (ADHD). The goal of this research study is to explore the relationship between beliefs about ADHD, training around ADHD, and diagnostic and treatment practices with adults with ADHD, as well as to determine whether psychologists are interested in future training programs.

We are asking you to take part because:

- You are a registered psychologist in Canada.
- You are currently practicing and living in Canada.
- You are fluent in English (reading and writing).

We are asking you to do the following:

- Complete an online survey that is voluntary and anonymous.

- Answer questions regarding your beliefs around ADHD. *For example, you may be asked to state, on a 5-point Likert scale, whether you agree with a statement such as "ADHD is a disorder that persists into adulthood."*
- Answer questions regarding your assessment and treatment practices with this population. *For example, you may be asked whether or not you receive referrals for ADHD in your practice, what assessment measures you use to assess and diagnose ADHD, and your protocol in treating ADHD.*
- Answer questions about your interest for future training relating to ADHD. *For example, you may be asked whether you are interested in participating in a future training for ADHD and your current level of training in this area.*

We are also asking you some questions about yourself. *For example, your age, gender, cultural background, and practice setting*. Demographic data will be used for descriptive purposes.

We are asking for 15-30 minutes of your time.

The research will use Adler Qualtrics survey technology.

The Research is Voluntary:

You can decide if you want to take part in this research. There will be no problem if you say "no". You can decide if you want to answer any question. You can also leave the research at any time for any reason. All questions in the demographic section include a "prefer not to say" option. You may skip any of these questions. The other questions are mandatory in order to participate in the survey. However, you can end the survey at any time if you decide you no longer wish to participate. **If you do not submit your results, your answers will not be recorded.** Once you submit your results, your data cannot be withdrawn.

The Research is Confidential:

All information you give us will be anonymous and confidential. Your name, IP address, and geographic location will not be recorded at any time in the survey. None of the demographic or practice setting answers will be used to identify participants.

If you choose to enter your email to receive a copy of the results of the study, your participation will no longer be anonymous. However, your email will not be

tied to your responses and every effort will be made to keep data confidential. It should be noted that there are some risks of data breeches when sending information over the internet that are beyond the control of the researchers.

Qualtrics will not collect your IP address, location data, or contact information. If you have any questions about the Qualtrics Privacy Policy, you may review their privacy and security policy here: **https://www.qualtrics.com/privacy-statement/**. You may also contact them directly at **privacy-dsr@qualtrics.com**. If you have any concerns after viewing the privacy and security policy, you should not complete the survey.

All information collected will be stored in a password-protected document. An additional copy of the data will be stored on a password-protected USB key, locked in a filing cabinet. Only the research team will have access to the data collected in the study. In accordance with Adler University's Research Ethics Board (REB) standards, the data will be kept for five years. Any other electronic documents pertaining to the research, such as dissertation drafts, will be kept on the student researcher's external hard drive, which will be password protected. After five years, the raw data materials will be deleted. The data collected through Qualtrics will be deleted after the study is completed.

The Results of the Research:

I will publish the results of the research in my dissertation. I may also write or speak about the research. Your name or any other information that might identify you will NOT be included in any writing or presentation.

If you want to receive a summary of the research results you can provide your e-mail at the end of the survey.

The Risks and Benefits:

You might feel some stress when you are asked certain questions about your beliefs, knowledge, or psychological practice. If you feel too uncomfortable you can:

1. Decide not to answer a particular question (if the option is there)
2. Take a short break from answering questions
3. Come back to the survey at a different time
4. Leave the survey at any time, and your responses will not be recorded

You may also feel you have learned something about yourself or your practice or discover gaps in your knowledge. Your answers may contribute to the current literature on ADHD and help to advance the research in this field.

If you have any concerns about your treatment as a participant, you may contact the Chair of the Research Ethics Board. Her contact information is below:

REB Chair: Rebecca Bateman, Ph.D.
E-mail: rbateman@adler.edu

Consent for this Research

- **I understand that I am taking part in this research voluntarily.**
- I know I can refuse to answer any question.
- **I know I can leave the research at any time by exiting the survey.**
- I know that my name will not be collected as part of this study and that providing my email address is completely optional.
- I know that the information I provide will be kept confidential.
- **I know my information will not be recorded until I submit my answers at the end of the survey.**
- I know that I have not given up any of my legal rights by taking part in this research even though I have signed this form.
- **I am giving my consent to take part in this study.**

I have read this consent form. By clicking "I agree" below, I consent to participate in this study.

- ☐ I AGREE
- ☐ I DO NOT AGREE

(Participants will not be able to continue without checking off one of the two boxes. Those who click "I agree" will be directed to the start of the survey but will have the option to go back and change their response if they wish. Those who click "I do not agree" will see the following message "We thank you for your time spent taking this survey."

Appendix K: Survey

Section 1: Demographic Information

The following section will include questions regarding age, gender, and ethnicity. Demographic data will be used for descriptive purposes. All questions in this section will be optional. You can opt out by selecting "prefer not to say".

1. Age, in years (you may skip this question by leaving it blank):
   _____

2. Gender:
   - o Male
   - o Female
   - o Non-binary
   - o Other: _____
   - o Prefer not to say.

3. Ethnicity (click all that apply)
   - □ White or European
   - □ Black, Afro-Caribbean, or African Canadian
   - □ Latino or Hispanic
   - □ East Asian
   - □ South Asian
   - □ Middle Eastern
   - □ Indigenous
   - □ Other: _____
   - □ Prefer not to say.

Section 2: Employment and Training

1. Years practicing as a clinical psychologist:
   - o 0-5
   - o 5-10
   - o 10-20
   - o 20+

2. Province of registration (click all that apply):
   - □ Alberta
   - □ British Columbia

- ☐ Manitoba
- ☐ New Brunswick
- ☐ Newfoundland and Labrador
- ☐ Northwest Territories
- ☐ Nova Scotia
- ☐ Nunavut
- ☐ Ontario
- ☐ Prince Edward Island
- ☐ Quebec
- ☐ Saskatchewan
- ☐ Yukon
- ☐ Other: _____

3. Specialized area(s) of clinical training (click all that apply):
   - ☐ Clinical Psychology
   - ☐ Counselling Psychology
   - ☐ Forensic Psychology
   - ☐ Vocational Psychology
   - ☐ School Psychology
   - ☐ Clinical Neuropsychology
   - ☐ Not applicable
   - ☐ Other: _____

4. Highest level of education completed:
   - o Doctoral degree
   - o Master's degree
   - o Bachelor's degree
   - o Other

5. Current workplace settings (click all that apply)
   - ☐ Private practice
   - ☐ School board
   - ☐ Hospital
   - ☐ Prison
   - ☐ Residential treatment (e.g., group homes)
   - ☐ Corporation
   - ☐ University
   - ☐ Community Practice
   - ☐ Other: _____

6. Prior workplace settings (click all that apply):
   - Private practice
   - School board
   - Hospital
   - Prison
   - Residential treatment (i.e., group homes)
   - Corporation
   - University
   - Community Practice
   - Other: _____

7. Which statement best applies to your current practice:
   - I work primarily with adults.
   - I work primarily with children.
   - I work with both adults and children.
   - Other: _____-

8. Which statement best applies to your current practice:
   - I split my time evenly between therapy and assessment.
   - I provide both therapy and assessment, but spend more time conducting assessments.
   - I provide both therapy and assessment, but spend more time conducting therapy.
   - I only provide therapy.
   - I only provide assessment.
   - I neither assess nor provide therapy.

Section 3: Beliefs about ADHD

For each of the following questions, click on the response that best characterizes how you feel about the statement:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
ADHD is a disorder that only affects children	1	2	3	4	5
A combination of medication and psychotherapy is the most effective treatment for ADHD	1	2	3	4	5

ADHD is overdiagnosed	1	2	3	4	5
ADHD is a behavioural problem	1	2	3	4	5
It is difficult to treat individuals with ADHD	1	2	3	4	5
ADHD is a disorder that persists into adulthood	1	2	3	4	5
Emotion dysregulation is a core feature of ADHD	1	2	3	4	5
Most adults seeking assessment for ADHD are malingering to receive stimulant medication	1	2	3	4	5
ADHD results from parents being inconsistent with rules and consequences	1	2	3	4	5
Stimulant therapy for ADHD creates a risk for later substance abuse	1	2	3	4	5
It is more difficult to diagnose ADHD than other psychological disorders	1	2	3	4	5
Dietary changes can treat ADHD symptoms	1	2	3	4	5
Stimulant medications do not benefit adults	1	2	3	4	5
ADHD does not occur in individuals with higher-than-average intelligence	1	2	3	4	5
Children diagnosed with ADHD can continue to be impaired by the disorder in adulthood	1	2	3	4	5

ADHD often co-occurs with other psychological disorders	1	2	3	4	5
The presence of another psychological disorder rules out a diagnosis of ADHD	1	2	3	4	5
ADHD is a hereditary condition	1	2	3	4	5
ADHD is not a real disorder	1	2	3	4	5
ADHD only affects males	1	2	3	4	5
ADHD should be assessed and treated by individuals with specialized training in this area of psychology	1	2	3	4	5
ADHD is caused by an attachment disorder	1	2	3	4	5
ADHD is a neurological disorder	1	2	3	4	5

Section 4: Practices in Assessing and Diagnosing Adult ADHD

For each of the following questions, click on the response that best characterizes how you feel about the statement:

1. I receive referrals for ADHD assessments or inquiries about ADHD in my practice.
   - Never
   - Sometimes
   - Often
   - Very Often

2. I screen for ADHD in my initial intake for assessments.
   - Never
   - Sometimes
   - Often
   - Very Often

3. I accept **child** ADHD assessment referrals in my practice.
   - o No
   - o Yes

4. I accept **adult** ADHD assessment referrals in my practice.
   - o No
   - o Yes

   ***The following question was only visible to participants who indicated that they only conduct therapy in their practice*

5. If you suspect a client you are treating for another condition may also have ADHD, would you (click all that apply):
   - o Ignore it and continue treating the other condition.
   - o Inform them of your suspicions and suggest a formal assessment.
   - o Provide them with questionnaires to do an informal assessment.
   - o Provide them with therapeutic techniques for their ADHD symptoms.
   - o Other: _____

   The following questions were only visible to participants who clicked "never" for both questions: "I accept **child/adult ADHD assessment referrals in my practice."

6. What is your protocol when you receive an ADHD assessment referral? (Click all that apply)
   - □ I will refer the client to another psychologist.
   - □ I will assess the client for comorbid conditions but will refer them to another medical professional for a specialized ADHD assessment.
   - □ I will refer the client to a medical doctor.
   - □ I will refer the client to a psychiatrist.
   - □ Other: _____

7. What is the reason you do not assess for ADHD in your practice? (Click all that apply)
   - □ I do not feel qualified.
   - □ I worry about malingering to acquire stimulant medication.
   - □ I do not have the time in my practice to conduct such a comprehensive assessment.
   - □ This is not an area of interest for me, and I would prefer to refer these clients to my colleagues.
   - □ I do not believe in ADHD (please elaborate if selected):_____

- Other: _____

***The following questions were only visible to participants who clicked sometimes, often, or, very often to "I accept **adult** ADHD assessment referrals in my practice."*

8. What criteria do you use to diagnose ADHD in your practice? (Click all that apply)
   - DSM-5/DSM-5-TR
   - ICD
   - Other: _____

9. What assessment measures do you to use to assess for adult ADHD (Click all that apply):
   - Structured/semi-structured interview
   - Adult ADHD Self Report Scale (ASRS)
   - Conners' Adult ADHD Rating Scales (CAARS)
   - CADDRA ADHD Assessment Form
   - Behaviour Rating Inventory of Executive Functioning (BRIEF)
   - Conners Continuous Performance Test
   - NEPSY
   - DSM-5 Criteria
   - Brown Attention Deficit Disorder Scale (BADDS)
   - Delis-Kaplan Executive Functioning System (D-KEFS)
   - Wechsler Adult Intelligence Scale (WAIS-IV)
   - DSM-5/DSM-5-TR Criteria
   - ICD Criteria
   - Other (s): _____

10. Do you request collateral information (e.g., informant questionnaires, interview with family/friends, report cards) in your adult ADHD assessments?
    - Never
    - Sometimes
    - Often
    - Always

11. How long do you allot to an adult ADHD assessment (testing time only)?
    - Less than 1 hour
    - 1-2 hours
    - 2-4 hours
    - More than 4 hours

12. Do you provide a feedback session following your adult ADHD assessments?
    - □ Never (please explain why not): _____
    - o Sometimes
    - o Often
    - o Always

13. Do you provide a report following your adult ADHD assessments?
    - □ Never (please explain why not): _____
    - o Sometimes
    - o Often
    - o Always

14. How many of your adult ADHD clients are seeking an assessment for the first time?
    - o None of them - they are all re-assessments.
    - o Some of them
    - o Most of them
    - o All of them

Section 5: Practices in Treating Adult ADHD

1. Do you accept therapy referrals from adult clients who have ADHD?
    - o Yes
    - o No

2. Do you specifically treat adult ADHD in your practice (i.e., you work therapeutically on treating symptoms of ADHD)?
    - o Yes
    - o No

The following questions were only visible to participants who clicked no to question 2: Do you specifically treat ADHD in your practice?

3. What is your protocol when you receive an ADHD treatment referral (click all that apply)?
    - □ I will refer the client to another colleague for therapeutic treatment.
    - □ I will refer them to primary care for medical treatment.
    - □ I will refer them to an executive functioning coach for skills training.
    - □ I will take the referral but refer them to a doctor or psychiatrist for medication management for their ADHD symptoms.

- ☐ I will take the referral and consult with another colleague on specific treatment for ADHD.
- ☐ Other: _____

4. What is the reason you do not work therapeutically on treating symptoms of ADHD? (Click all that apply):
   - o I do not feel competent in treating adult ADHD symptoms specifically.
   - o I think that another clinician would be more suitable.
   - o I believe that ADHD symptoms can only be treated using stimulant medication.
   - o I prefer to allot the therapy time to treating comorbid mental health issues, such as anxiety and depression.
   - o Other: _____

The following question was only visible to participants who clicked no to question 1: Do you accept therapy referrals from adult clients who have ADHD.

5. What is the reason you do not accept therapy referrals from clients with ADHD? (Click all that apply)
   - ☐ I only work with children.
   - ☐ This is not an area of interest for me, and I would prefer to refer these clients to my colleagues.
   - ☐ I do not feel that I have the proper training to treat adult ADHD.
   - ☐ I worry about therapy-interfering behaviours (e.g., lateness, forgetfulness, impulsivity).
   - ☐ I think that another clinician would be more suitable.
   - ☐ I believe that ADHD can only be treated using stimulant medication.
   - ☐ Other: _____

The following section was only visible to participants who selected "yes" to the question: Do you accept therapy referrals from clients who have ADHD:

6. What are your current practices in treating adult ADHD?
   - o I will only treat their mental health symptoms.
   - o I prioritize treating their mental health symptoms and refer them elsewhere for executive functioning coaching.
   - o I will provide treatment for mental health symptoms and provide executive functioning coaching.

- Other: _____

7. What additional supports, if any, do you implement for your adult ADHD clients? (Click all that apply)
   - ☐ Phone check-ins
   - ☐ Appointment reminders
   - ☐ Flexibility on late cancels and/or no-shows
   - ☐ None
   - ☐ Other: _____

8. What modality do you use to treat adult clients with ADHD?
   _____

Section 5A: Specific Strategies in Working Therapeutically with ADHD
This section was only available to participants who selected "yes" to the question: Do you accept therapy referrals from clients who have ADHD:

In treating your **adult clients** with ADHD, how often do you discuss or work with the following issues:

	Never	Sometimes	Often	Very Often
Executive functioning skills	1	2	3	4
Emotion dysregulation	1	2	3	4
Difficulty with relationships	1	2	3	4
Memory impairment	1	2	3	4
Addiction or substance abuse	1	2	3	4
Housing	1	2	3	4
Psychological trauma	1	2	3	4
Accidents or injuries	1	2	3	4
Learning challenges	1	2	3	4
Depression	1	2	3	4
Anxiety	1	2	3	4
Obsessions or hyper-fixations	1	2	3	4
Sensory sensitivity	1	2	3	4
Medication management	1	2	3	4
Other psychological conditions	1	2	3	4

Section 6: Interest in Specific Training for ADHD

1. What is your current level of training regarding ADHD?

- I have not received specialized training in this area.
- I have received training on ADHD but do not feel equipped to diagnose or treat ADHD.
- I have received training on ADHD and feel competent in working with ADHD.
- I consider myself an ADHD specialist.
- I consider myself an ADHD specialist and I train other psychologists in this domain.
- Other: _____

2. What is your current interest level in receiving training for ADHD? (Please select the answer that best reflects how you feel)

- I would be interested in a multi-day and comprehensive training program.
- I would be interested in a short (e.g., 1 hour) training program.
- I would be interested in facilitating a training program.
- I am not interested in attending a training program.
- Other: _____

Appendix L: Closing Page

This concludes the survey. Thank you for your participation. If you have any questions about this research, you may contact the Chair of the Research Ethics Board. Her contact information is below:

REB Chair: Rebecca Bateman PhD
E-mail: rbateman@adler.edu

If you would like to receive a summary of research results once the study is completed, please click on the link below to be directed to a separate site. By providing your email address, your participation in this study will no longer be anonymous. However, your e-mail address will not be linked to your survey responses.

Click this link to enter your email to receive the study's summary results: *[Link to separate page]*

Request for Summary of Results Page (*Participants will only see this message if they click on the above link)*

Please type your email address below to receive a summary of the research results. Once the study is completed, we will email you a summary of the overall results. You will not receive your individual results. By providing your email address, your participation in this study will no longer be anonymous. However, your e-mail address will not be linked to your survey responses.

Enter your email here: _____

Appendix M: Research Ethics Board Certificate of Approval

ADLER UNIVERSITY | 520 Semour Street Vancouver, BC VJB 3J5 Canada | tel 236.521.2500 fax 236.521.2400

Adler University (Vancouver Campus)
Research Ethics Board

Certificate of Approval

Name of Researcher: **Alessia Lista**

Title of Research: **Adult ADHD: A Survey of Current Practices in Psychology**

The Research Ethics Board Application for the research indicated above has been reviewed by the Adler (Vancouver) Research Ethics Board.

The Application and related materials have been approved as compliant with the TCPS2 (2018) and Adler University (Vancouver Campus) policies.

REB Member: Rebecca Bateman

Approval Date: **October 25, 2022**

Expiry Date: **October 25, 2023**

Dr. Rebecca Bateman, Chair of Research Ethics Board