

**A Discussion on How Shifting the Paradigm of Understanding Surrounding Neurodiversity
Will Influence Therapeutic Practices and Benefit Neurodivergent Individuals**

by

Brianna Morton

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APPROVED BY

Andria Weiser, M.A., R.C.C., Capstone Instructor, Master of Counselling Faculty

School of Health and Social Sciences

Abstract

This capstone explores how shifting the paradigm of understanding surrounding neurodiversity will influence therapeutic practices and benefit neurodivergent (ND) individuals. The purpose of this capstone is to create systemic change in the way healthcare professionals view and treat ND individuals. Integrating a neuro-affirming lens in therapeutic practices will facilitate a framework through which healthcare practitioners can create inclusive environments that recognize strengths and accept differences. Rather than reinforcing harmful narratives through pathologization, mental health professionals can apply this neuro-affirming framework which will promote improved understanding and empathy, enable the creation of tailored treatments and supports, and empower ND individuals. Scholarly research revealed several therapeutic modalities that, through the application of the neuro-affirming framework, could be adapted to support ND individuals, including applied behaviour analysis (ABA), acceptance and commitment therapy (ACT), solution focused therapy (SFT), motivational interviewing (MI), cognitive behavioural therapy (CBT), dialectic behaviour therapy (DBT), narrative therapy, and family therapy. Through the application of the neuro-affirming framework, mental health workers can tailor supports and empower ND individuals rather than reinforcing harmful narratives through pathologization. When applied with a neuro-affirming lens, techniques like psychoeducation, mindfulness and somatic approaches, and interest- and strength-based approaches have been used successfully with ND individuals. This capstone has demonstrated the effectiveness of the application of the neuro-affirming lens in creating individual and systemic improvements to mental health treatments and outcomes for ND individuals.

Keywords: neuro-affirming, neurodivergent, understanding, acceptance, therapeutic paradigm shift

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Chapter One: Introduction

Topic Overview

In this capstone, I explore how applying a neuro-affirming framework to current therapeutic modalities and interventions can positively impact mental health outcomes for neurodivergent (ND) individuals. A neuro-affirming lens recognizes and celebrates differences rather than pathologizing them. Exploring this topic is critical as current standards of practice in healthcare fields often fail to adequately meet the needs of ND individuals.

For ND individuals, accessing mental health services that competently address their unique needs can be a struggle. Stigma and discrimination faced by ND individuals can create barriers to care before therapy even begins (CADDAC, 2019; Hanley et al., 2023). And if ND individuals can overcome these barriers, oftentimes the care they receive fails to adequately address their unique differences and leaves many ND individuals feeling unseen, unsupported, and underserved (CADDAC, 2019; Hanley et al., 2023). Despite the growing awareness of neurodiversity, industry standards for therapists continue to prioritize operating within neuro-normative frameworks that pathologize difference rather than embracing it. This mismatch between need and current therapeutic standards leads to systemic failures such as misdiagnoses, inappropriate treatment goals and techniques, and ultimately, a lack of trust in mental health services (Hanley et al., 2023). Neuro-normative therapeutic goals and approaches that focus on conformity rather than support fail to adequately address the unique needs of ND individuals and can result in harm rather than benefit for the client (Hanley et al., 2023). ND people frequently cite the primary reason for nonengagement, treatment failure, or drop-out is due to the therapist's lack of understanding or experience in working with ND people (Bowers & Widdowson, 2023). The question is not whether these barriers exist, but how mental health practices can shift to

better meet the unique needs of ND individuals. To better serve ND individuals, mental health services should embrace the use of a neuro-affirming lens (Chapman & Botha, 2022; Chapman & Bovell, 2020).

Barriers to Treatment

Barriers contribute to ND individuals being unable to access counselling services. These include socioeconomic factors, intersectional factors such as gender and racial identity, and lack of trained professionals (CADDAC, 2019; Hanley et al., 2023).

Socioeconomic Factors. Financial barriers to diagnosis, treatment, and healthcare for ND individuals from lower socioeconomic backgrounds can compound negative mental health impacts. The cost of healthcare services, medications, therapies, transportation to and from healthcare facilities, and insurance can be prohibitive and can negatively impact health outcomes (CADDAC, 2019). Stigma surrounding poverty can also be a deterrent (CADDAC, 2019). Lack of affordable treatment options, due to lack of public funding, results in lack of access to essential medical and psychological services (CADDAC, 2019).

Gender. Historically, women have been underdiagnosed with attention-deficit/hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) because the diagnostic criteria are based on male children (Walters, 2018). It is estimated that 75% of women with ADHD are undiagnosed (Walters, 2018). Prior to receiving an ADHD diagnosis, girls were more likely than boys to be referred to a mental health clinic for emotional symptoms, to have had more visits to a mental health clinic, to have received more individual psychotherapeutic counselling, to be admitted to an inpatient care unit due to acute psychiatric symptoms, and to be prescribed non-ADHD medication (Klefsjö et al., 2020). Boys are more than twice as likely as girls to receive an ADHD diagnosis, and girls, on average, are diagnosed 5 years later than boys

(Walters, 2018). Further evidence that suggests women and girls are underdiagnosed in childhood is seen in the different ratios of male to female diagnosis in childhood (3:1) and in adulthood (1:1) (Attoe & Climie, 2023). Male privilege plays a role in ND women's access to diagnosis and treatment, which in turn impacts access to physical and mental health care (Attoe & Climie, 2023; Walters, 2018).

Racial Identity. Black, Indigenous, and people of colour (BIPOC) individuals have faced and continue to face discrimination, including in the healthcare system. When encountering atypical behaviours in BIPOC individuals, society is more likely to assume criminality rather than neurodiversity (Moody, 2016), whereas similar behaviour in Caucasians is more likely to be addressed appropriately due to White privilege. Underdiagnosis of ADHD in Black people has been linked to systemic racism and institutional policing in school and society that ascribes ND behaviours in Black people as criminal rather than divergent (Moody, 2016). This biased attribution contributes to the “school-to-prison pipeline” (Moody, 2016), which can also be found in other BIPOC populations. BIPOC youth are more likely to receive a diagnosis of a disruptive behaviour disorder than ADHD or ASD (Fadus et al., 2020). For BIPOC youth, the impact of racism has led to significant disparities in the diagnosis and management of neurodevelopmental disorders in addition to disparities in the types and quality of services received, leading to long-term adverse mental health effects (Spinks-Franklin et al., 2023). This discrimination is a barrier to ND BIPOC people receiving adequate physical or mental health care.

Inadequate Counsellor Education & Training. Another barrier to treatment faced by ND individuals is inadequate counsellor education and training. Lack of counsellor training contributes to stigma, excessive wait times, and poor therapeutic outcomes (CADDAC, 2019).

Stigmatized individuals are less likely to seek out and receive treatment (CADDAC, 2019). Therapists who lack competency may be reluctant to work with ND clients (Hanley et al., 2023). ND clients frequently feel misunderstood in their daily lives, and working with a therapist who lacks understanding only reinforces this disconnect, hindering therapeutic progress and outcomes (Hanley et al., 2023). Current counsellor training programs either do not cover neurodivergence, or cover it in a “tokenistic way, from a NT [neurotypical] perspective, highlighting ‘deficits’ and emphasising the ‘challenges’ when working with ND people” (Hanley et al., 2023, p. 58). Applying NT counselling techniques to ND people will be less likely to lead to successful therapeutic outcomes as it fails to take cultural and communication differences into consideration (Hanley et al., 2023). The analogy “I am a normal zebra, not a strange horse” succinctly demonstrates the ND desire to be recognized and treated as ND rather than having their unique needs misunderstood, misinterpreted, and inadequately supported by systems designed for NTs.

Cost of Treatment Barriers

If left undiagnosed or untreated, ADHD and ASD can have devastating effects on physical and mental health. Undiagnosed and untreated ADHD/ASD “has been linked to an increased risk of mood and anxiety disorders, substance abuse disorders, transportation accidents, suicides, injuries, teenage pregnancies, unemployment, underemployment, and incarceration” (CADDAC, 2019, p. 4). A recent study found undiagnosed/untreated ADHD/ASD can decrease life expectancy by up to 22 years (CADDAC, 2019). Eighty percent of adults with ADHD/ASD have comorbid psychiatric disorders (CADDAC, 2019). In fact, it is often these comorbid disorders or risk factors rather than ND traits or behaviours that lead ND people to seek counselling services (CADDAC, 2019). ND behaviours are most often viewed as problematic by others rather than by ND individuals themselves. Most distress related to ND

symptoms comes from internalized mismatches in environmental fit rather than true internal distress (Chapman, 2020). The importance of diagnosis and treatment of ND conditions for physical and mental health outcomes is clear. Without diagnosis and treatment, physical and mental health can deteriorate causing further problems that need to be addressed.

Problems With Current ND Counselling Practices

Unfortunately, overcoming barriers to treatment is only part of challenge. The limitations of current counselling practices also present significant impediments to therapeutic progress and outcomes for ND individuals (Pantazakos, 2023). Current counselling practices fail to meet ND clients' needs due to an over-reliance on outdated, pathologizing frameworks (Pantazakos, 2023). Due to costs, lack of acceptance, and lack of understanding, a majority of therapists continue to operate within the medical model of disability, which treats neurodivergence as a set of symptoms to be "fixed" rather than recognizing it as an integral part of identity (Pantazakos, 2023). This mismatch not only alienates clients but also limits the potential for meaningful therapeutic progress. Over-reliance on criteria like the "four Ds": *deviant* from the social norm; causing *distress*; causing *dysfunction*; and putting the client and/or others in their environment in *danger*, results in mental health professionals classifying ND traits as pathological traits when, in reality, they are "irremovable parts of the self and thus not up for negotiation within psychotherapy" (Pantazakos, 2023, p. 3). "Any impairment and distress associated with these traits is not due to an inherent pathology, but due to society being ill-equipped to accommodate harmless Autistic deviations from the norm" (Pantazakos, 2023, p. 3).

Despite ND individuals seeking therapy for the same reasons as NT individuals, such as anxiety, depression, trauma, grief, or relational issues (Gladding & Alderson, 2016), therapeutic approaches continue to prioritize addressing traits like inattention, hyperactivity, or social

"deficits" associated with diagnostic criteria (Pantazakos, 2023). Additionally, ND individuals are more likely than their NT peers to have addiction issues (2–3 times; Schellekens et al., 2020), eating disorders (3.8 times; Villa et al., 2023), relationship issues (Wymbs et al., 2021), self-esteem issues (Harpin et al., 2013), emotion dysregulation issues (Astensvald et al., 2022), and executive functioning issues (Silverstein et al., 2018). Thus, sole focus on symptom reduction does a disservice to ND individuals as it overlooks these other issues that ND individuals experience with more frequency than their NT peers. This frustrating dismissal is akin to going to the doctor with a serious problem and being told to go home and lose a few pounds. While distress can and does result directly from symptoms, most distress related to ND symptoms comes from internalized mismatches in environmental fit and lack of accommodation rather than true internal distress (Chapman, 2020). Research has found that 70%–75% of ADHD adults have at least one comorbid psychiatric disorder (Bowers & Widdowson, 2023): anxiety disorder (47%), mood disorder (38%), substance use disorder (42.7%), antisocial personality disorder (16.8%), bipolar disorder (15%; CADDAC, 2019). It is often these comorbid conditions that lead ND individuals to seek counselling services (CADDAC, 2019). A recent study found the five main reasons Autistic individuals seek therapy are depression (76%), interaction and social problems (48%), social anxiety (44%), problems coping with everyday life (44%), and anxiety (38%; Bowers & Widdowson, 2023).

While it is important to address all aspects of distress, solely focusing on symptom reduction can undermine therapeutic progress and outcomes, negatively impact quality of life and self-acceptance, and can reinforce feelings of inadequacy, conformity above comfort, and effortful practices like masking (Pantazakos, 2023). Research shows that ND individuals' wellbeing is strongly correlated with acceptance, whether from family, peers, teachers,

employers, or therapists (Pantazakos, 2023). Shifting the paradigm of understanding surrounding neurodiversity to include acceptance and accommodation would likely improve therapeutic outcomes and quality of life for ND individuals (Chapman & Botha, 2022; Chapman & Bovell, 2020).

The general lack of enquiry or interest in adapting psychotherapy to meet ND needs is highly problematic. Applying traditional psychotherapeutic methods will not yield the same positive results for ND people as have been shown in NTs for two main reasons: lack of acceptance of ND identity risks further internalization of issues and thus lack of positive therapeutic progress; and standard forms of most psychotherapeutic methods are incompatible with frequent ND characteristics (Pantazakos, 2023).

Lack of understanding and lack of acceptance lead to misleading assumptions that result in counsellors acting contrary to the interests of ND individuals (Bowers & Widdowson, 2023).

Bowers and Widdowson (2023) identified three of the main pitfalls counsellors can succumb to due to this lack of understanding and acceptance when working with ND clients.

Misunderstanding and pathologizing coping behaviours or defense mechanisms, inviting over-adaptation or masking by prioritizing neuro-normative behavioural outcomes, and making assumptions about needs, abilities, and interests based on ND behaviours, can all lead to negative mental health outcomes for ND individuals (Bowers & Widdowson, 2023).

By practicing cultural and communication competence, therapists can build more effective therapeutic alliances with ND clients and encourage more positive outcomes (Dougan, 2023). Avoiding common pitfalls such as pathologizing coping mechanisms, over-relying on outcome-focused care, inviting masking behaviours, or making assumptions based on behaviour, allows therapists to better address the unique needs of ND individuals (Bowers & Widdowson,

2023). Use of a neuro-affirming lens can aid therapists in reframing neurodivergence as a difference, not a disorder, and focusing on collaborative approaches to improve wellbeing over conformity (Chapman & Botha, 2022).

Purpose Statement

The purpose of this capstone is to facilitate a paradigm shift surrounding understanding neurodiversity. Put simply, I aim to change the way people view ND individuals. Integration of the neuro-affirming framework discussed in this capstone could benefit anyone working with ND individuals, including healthcare professionals and researchers, especially those working in mental health. It is my firm belief that the application of the neuro-affirming framework to therapeutic practice will create individual and systemic improvements to mental health treatments and outcomes. I hope to demonstrate the effectiveness of the application of the neuro-affirming lens through reviewing current therapeutic modalities, contrasting case conceptualization with and without the neuro-affirming framework, and suggesting neuro-affirming interventions and practice improvements.

Theoretical/Conceptual Framework

The conceptual framework at the core of this research is the neuro-affirming framework, a lens that challenges pathologizing narratives and redefines neurodivergence as difference rather than deficit (Chapman & Botha, 2022). An examination of disability models, language, culture, and acceptance lends historical, political, and societal context to the neuro-affirming framework through which this research is analyzed (Chapman, 2020; Hillary, 2020). The lens through which society views disability determines whether it is met with empathy or erasure; the neuro-affirming framework builds on existing disability models to center acceptance and understanding (Chapman, 2020; Chapman & Botha, 2022). Language has the power to create stigma or

acceptance (Botha et al., 2023; Dunn & Andrews, 2015; Dwyer, 2022; Smith et al., 2023; Taboas et al., 2022). The neuro-affirming framework prioritizes empowering language that validates ND identities and rejects stigmatization (Botha et al., 2023; Dunn & Andrews, 2015; Dwyer, 2022; Smith et al., 2023; Taboas et al., 2022). Disability culture offers a counter-narrative to societal stigmas, emphasizing community and pride (Dunn & Andrews, 2015; Smith et al., 2023; Taboas et al., 2022). A neuro-affirming framework draws heavily on these principles to celebrate neurodivergence (Chapman & Botha, 2022). Acceptance is not passive tolerance; it is active validation (Chapman & Botha, 2022). The neuro-affirming framework makes this principle central to fostering genuine wellbeing for ND individuals (Chapman & Botha, 2022).

Disability Framework

Disability Models. In recent years, disability identity models have shifted in ways that have had critical impacts on treatments for and societal inclusion of ND people (Chapman, 2020). This paradigm shift, from a medical model to a social model to a value-neutral model, is central to understanding the neuro-affirming lens that when applied to therapeutic modalities and techniques would likely improve outcomes for ND individuals (Chapman & Botha, 2022; Chapman & Bovell, 2020).

In the medical model of disability, ND conditions like ADHD and ASD have been treated as medical problems requiring medical intervention or pity rather than intrinsic differences that are neither inherently better nor worse (Chapman, 2020). The continued pathologizing of neurodiversity is one of the main reasons that neuro-affirming practices have been slow to enter the therapeutic zeitgeist, despite increased awareness and understanding of these conditions (Chapman, 2020; Chapman & Botha, 2022; Chapman & Bovell, 2020). Due to this pathologization, much of society does not view being ND as a part of an individual's identity the

same way people view being Black or being female as intrinsic to identity (Chapman, 2020; Chapman & Botha, 2022; Dunn & Andrews, 2015; Smith et al., 2023; Taboas et al., 2022). This perspective can lead to ND individuals denying or hiding a part of themselves which can result in internalized stigma or shame (Chapman, 2020). Counsellors wishing to improve therapeutic outcomes for ND clients would benefit from using the neuro-affirming lens which asserts treating neurodivergence as an identity worthy of an intersectional approach is more beneficial than pathologizing it (Bowers & Widdowson, 2023; Chapman & Botha, 2022; Dougan, 2023; Hanley et al., 2023).

The social model of disability posits that “disability is caused not by impairment, but rather by how society fails to accommodate and accept impaired individuals” (Chapman, 2020, p. 62). New research utilizing the neuro-affirming lens has suggested that one way to improve the social-environmental fit for ND people would be to treat ND and NT ways of being as separate cultures and to address the cross-cultural communication breakdown that creates hostile social environments for ND people (Hillary, 2020). Contrary to this model’s stance, some hardships cannot be solely attributed to ableist societal structures. It is, however, important to recognize the part systemic ableism plays in disadvantaging ND individuals. Current ASD diagnostic criteria define social differences as deficits (American Psychiatric Association [APA], 2022). This definition fails to recognize that communication breakdowns are the result of mutual mismatches, not a social deficit inherent to the ND person (Crompton et al., 2021). Research using The Telephone Game showed that communications challenges are increased when information is shared between people with different neurotypes (Crompton & Fletcher-Watson, 2019). The Double Empathy Problem is the theoretical framework that aids in understanding the Telephone Game results (Milton et al., 2022). Awareness of the Double Empathy Problem,

which posits communication is enhanced between people who share similar social experiences, communications approaches, and neurotypes, is a key component of utilizing the neuro-affirming lens in therapeutic practice (Milton et al., 2022).

The value-neutral model of disability rejects the distinction between impairment and disability, acknowledging that some disability is socially constructed, and some is an objective condition (Chapman, 2020). The model suggests that disability should not be considered inherently good or bad and makes an explicit shift of focus to the importance of wellbeing, a key focus of the neuro-affirming lens (Chapman, 2020). This model aims to avoid hardship-denying and tragedy-framing, by instead focusing on a more balanced view of disability that aims to create acceptance and understanding (Chapman, 2020). Despite the benefits of this more balanced model, some ND people still find it difficult to choose whether to self-identify as disabled (Dwyer, 2022). Functionally, not all of society subscribes to the value-neutral model of disability, or to applying a neuro-affirming lens. If an ND individual claims disability status, they could be faced with the repercussions of stigma or discrimination, and if they choose not to claim disability status, they could be denied access to needed resources (Chapman, 2020). This ongoing dilemma is one key reason for the importance of using a neuro-affirming lens that focuses on acceptance and wellbeing, especially when addressing mental health concerns (Chapman & Botha, 2022).

The recent paradigm shift towards the value-neutral model of disability, in theory, should allow ND people to claim their invisible disability status as a part of their identity without shame or fear of repercussions. Unfortunately, ND people still face stigma and discrimination due to lack of understanding and popularized misconceptions (CADDAC, 2019). Applying a neuro-

affirming lens, especially in therapeutic practice, is vital when trying to address the ongoing stigma and discrimination faced by ND individuals.

Disability Language. This continued dismissal of ND identity and experience in favour of medicalization and ostracization is exemplified in the identity-first vs person-first language debate. The American Psychological Association (APA) advocates the use of person-first language (i.e., person with disabilities, person with autism), which they say helps to reduce bias in practice, research, and educational settings (Botha et al., 2023; Dunn & Andrews, 2015; Dwyer, 2022; Smith et al., 2023; Taboas et al., 2022). Person-first language was even written into law in the United States of America in the Americans with Disabilities Act (1990) and the Individuals with Disabilities Education Act (1997; Wooldridge, 2023). No such law exists in Canada (Wooldridge, 2023). However, ND individuals and parents of ND individuals prefer identity first language (i.e., disabled person, Autistic person) because they believe it reduces bias and fosters a sense of self-acceptance, whereas person-first language does not prevent bias but instead implies shame instead of true equality (Smith et al., 2023). Person-first language subtly implies that there is something inherently negative about disability and it unnecessarily dissociates the disability from the person (Botha et al., 2023; Dunn & Andrews, 2015; Dwyer, 2022; Smith et al., 2023; Taboas et al., 2022). Dunn and Andrews (2015, p. 257) recorded a poignant thought from an Autistic person on the importance of language and identity: “I am absolutely not a ‘person with autism.’ It’s [the autism] not detachable.”

Identity-first language promotes autonomy, agency, and acceptance of one’s own personal identity in the face of discrimination and prejudice (Botha et al., 2023; Dunn & Andrews, 2015; Dwyer, 2022; Smith et al., 2023; Taboas et al., 2022). Research suggests that counsellors wishing to improve therapeutic outcomes for their ND clients should follow the lead

of their clients surrounding disability language use rather than following APA guidelines (Botha et al., 2023; Dunn & Andrews, 2015; Dwyer, 2022; Smith et al., 2023; Taboas et al., 2022). This suggestion demonstrates clear use of the neuro-affirming lens as it centers ND voices, rejects pathologization, and promotes acceptance.

Disability Culture. Disability culture promotes a sense of unity and community; it is not shameful to claim membership to disability culture (Dunn & Andrews, 2015; Smith et al., 2023; Taboas et al., 2022). Developing cultural competence, appreciating, understanding, and interacting with diverse people, is essential for mental health professionals to provide effective and inclusive care (Dunn & Andrews, 2015; Smith et al., 2023; Taboas et al., 2022). Using a neuro-affirming lens with ND clients demonstrates effective cultural competence (Dunn & Andrews, 2015; Smith et al., 2023; Taboas et al., 2022). While celebration of disability culture is most observable in visible disability groups, such as Deaf culture, it exists to the same extent for invisible disabilities, this includes ND culture. Dunn and Andrews (2015) had this to say regarding disability culture:

When capitalized *Deaf* refers to a culture, as distinct from *deaf*, which is a pathological term; this distinction echoes that between *gay* and *homosexual*. An increasing number of deaf people maintain they would not choose to be hearing. To them, *cure*—deafness as pathology—is anathema; *accommodation*—deafness as disability—is more palatable; and *celebration*—Deafness as culture—trumps all. (p. 261)

Rather than pathologizing neurodivergence, counsellors can improve therapeutic outcomes for ND clients by employing the neuro-affirming lens which prioritizes understanding, accepting, and celebrating disability culture as a unique identity experience for ND people.

Disability Acceptance. Acceptance, being perceived as adequate, valid, or suitable, is critical for mental health outcomes, especially those of ND individuals (Willoughby & Evans, 2019). The damaging effects of being seen as inadequate, broken, or malingering have on mental health cannot be understated (Beaton et al., 2022; Dangmann et al., 2024; Willoughby & Evans, 2019). Tolerance, the willingness to endure the existence of behaviour one dislikes or disagrees with, is not acceptance (Chapman & Botha, 2022). Acceptance is one of the key tenets of a neuro-affirming lens (Chapman & Botha, 2022; Chapman & Bovell, 2020). Research has shown that higher self-acceptance of disability is positively associated with higher self-regulated learning, self-compassion, and self-efficacy (Willoughby & Evans, 2019). Another study found that low self-compassion contributes to poorer mental health in ADHD adults (Beaton et al., 2022). Further research has shown that societal and self-acceptance, improves resilience in ADHD children and adolescents (Dangmann et al., 2024). Improving knowledge of ADHD can foster better understanding and acceptance of ADHD individuals (Dangmann et al., 2024).

The neuro-affirming framework prioritizes acceptance as a key principle, challenging stigmatizing narratives and fostering validation. Prioritizing acceptance and self-compassion can help ND individuals reduce cognitive dissonance and distress when identifying and addressing obstacles to thriving (Beaton et al., 2022). The analogy “I am a normal zebra, not a strange horse” beautifully aligns with the principles of disability acceptance and the neuro-affirming framework as it demonstrates the importance of identity affirmation versus erasure and valuing versus denigrating differences.

Disability Lens. Applying a disability lens to research will allow for critical analysis of scholarly material. Examination of language use, success measures, research questions, and data collection methods can reveal if a neuro-affirming lens was used to conduct the research

(Dougan, 2023; Hanley et al., 2023). Critical analysis of which disability model is employed, and the inclusion of cultural competence, can help ascertain if the neuro-affirming lens was utilized in the research (Chapman, 2020). Research papers that avoid deficit-based language, such as correcting behaviours, and focus on strength-based contextual inquiries that center on enhancing quality of life, validating lived experiences, and promoting self-acceptance are more likely to be utilizing a neuro-affirming lens (Grant, 2024). Papers that use language such as “infected by ADHD” (Shalani et al., 2017, title), clearly reveal their discriminatory perspective and thus conclusions drawn from papers such as that one are less likely to be beneficial to ND individuals (Dwyer, 2022). Historically, mental health research has devalued ND identity by focusing on outcome goals that prioritize neuro-normalization (Grant, 2024). A neuro-affirming lens in research can be identified by looking for success metrics that prioritize enhanced self-understanding and self-compassion, improved emotional and sensory regulation skills, increased autonomy and advocacy, and greater connection to community (Grant, 2024). Identifying if researchers and data collection methods included ND individuals and perspectives is another excellent way of detecting use of the neuro-affirming lens (Dougan, 2023; Hanley et al., 2023). A neuro-affirming framework that promotes understanding and acceptance is key not only in practice, but in research (Beaton et al., 2022; Dangmann et al., 2024).

Methodology

Literature Review Process

This capstone is centered around the neuro-affirming framework. As such, I began my capstone by researching this framework along with disability models. In order to apply this framework to therapeutic practice, I used Google Scholar and the CityU library database to search how different therapeutic modalities could be used to support ADHD individuals. Key

search terms included “ADHD and CBT,” “ADHD and DBT,” “ADHD and narrative therapy,” etc. I searched for peer-reviewed articles from the past 5–10 years, with a preference placed on the most recent and up-to-date research. Studies were selected for this capstone based on their relevance to the topic, especially those that investigated therapeutic outcomes for ND individuals. I then evaluated the reliability and validity of the sources, by considering sample size, methodology, data analysis, cultural influences, bias, conflict of interest, research goals, and outcome measures. To ensure generalizability, I favoured studies with larger, more diverse sample sizes. I am aware that different cultures have different views on ADHD, so I gathered culturally diverse resources to avoid a North American bias or an overly westernized worldview, though these studies were more limited in their availability. I gathered studies that used lenses from different models of disability, then evaluated which research was conducted using a neuro-affirming lens to facilitate the comparisons in this capstone. To ensure impartiality, I ensured that I had an adequate number of papers which contradicted my own bias for the neuro-affirming lens. A summary of my literature research approach, including article titles, methodologies, key themes, and my inferences can be found in Appendix A.

Writing & Editing Process

This capstone was written and cited in APA 7 citation style as per current academic standards. A complete list of references, in the APA 7 format, can be found at the end of this capstone and in-text citations are provided throughout the capstone. I utilized previous research I had conducted over the course of this degree on various ADHD topics and filled the gaps with additional research as required. By dedicating uninterrupted time and focused energy to this monumental task, I was able to ensure clarity and cohesion in my arguments and communication.

Using the neuro-affirming framework, leveraging hyper-fixation allowed me to maintain momentum, ensure critical points were remembered, and avoid frustration and distraction.

External reviewers, including two professional editors, my academic advisor, and a faculty second reader, were utilized for the editing and proofreading process to ensure grammatical correctness and logical progression of arguments. Using text-to-speech software, I was able to listen to my capstone to further assist in catching mistakes and ensuring logical progression. Despite the effectiveness of AI editing software, neuro-*dis*affirming academic regulations disallow its use. Therefore, no AI editing software was used in this capstone.

Contribution to the Field

Traditional therapeutic modalities, which rely on the medical model of disability, fail to effectively support or engage ND clients. Pathologizing ADHD and focusing on neuro-normative goals neglects the unique strengths and needs of ND individuals (Chapman & Botha, 2022; Chapman & Bovell, 2020). Through this capstone, I aim to challenge stigma and discrimination affecting ND individuals and promote inclusive, culturally competent therapeutic practices. Applying this framework will hopefully help to dismantle intersectional barriers and lead to more equitable and accessible therapeutic practices. By exploring the impact of applying a neuro-affirming framework, this capstone will help transform therapeutic practices and dismantle current structural power systems that maintain societal inequities and negatively impact treatment options and outcomes for ND individuals. By emphasizing a neuro-affirming framework, my aim is to shift the focus from pathology to acceptance and empowerment.

This capstone aims to advance psychology and social justice by promoting a more inclusive and understanding lens that improves training in and application of empowering, affirmative, and respectful practices, trust and respect in the therapeutic alliance, and

engagement and outcomes for ND clients. The neuro-affirming framework discussed in this capstone can encourage holistic support that recognizes strengths and differences, leading to better therapeutic outcomes. This capstone aims to address the current gap in research and treatment of ND individuals in mental health practices by demonstrating the benefits of applying a neuro-affirming lens to current therapeutic standards of practice. This framework could greatly benefit the field of counselling and the ND individuals who partake in counselling services. There is great value in undertaking this research and utilizing this neuro-affirming framework.

Statement of Reflectivity and Positionality

Awareness and acknowledgement of how my social location and my experiences impact my research is paramount as it allows for a critical examination of bias and perspective to determine the veracity and legitimacy of my work. As such, it is important to disclose that I have ADHD, my education and career center around helping those with ADHD, my business is called Understanding ADHD™, and I am passionate about helping those with ADHD understand and accept themselves and helping NTs and society understand and accept us. Curiosity and passion drive research, therefore I see my experience with ADHD as an asset for this research. The topic of this capstone is a result of my firsthand experience of having ADHD and facing the discrimination and barriers outlined above. As a Caucasian, Canadian, educated, middle class, queer, ADHD woman, I have a unique perspective that impacts this research. I believe that firsthand experience can provide perspective that cannot be attained another way. My personal ADHD journey may differ from that of an ADHD man's or an ADHD BIPOC (Black, Indigenous, and People of Color) person's. And it certainly differs from a NT's journey. Having an awareness of these differences encourages me to include research that encompasses a multitude of perspectives as opposed to only papers that confirm my biases.

Furthermore, I would like to acknowledge my fierce commitment to advocacy, specifically relating to disability and neurodiversity. The neuro-affirming lens I use throughout this capstone is one I fervently believe in. I also eschew the use of person-first language and prefer identity-first language for the reasons I have previously indicated. My use of this language can alienate some ND individuals who are not yet fully ready to accept neurodiversity as an intrinsic, unalienable part of themselves. Additionally, I proudly claim my permanent disability status as I do not view disability as shameful. However, I acknowledge that for many, acceptance of one's own differences is a difficult journey that requires overcoming internalized stigma and is often a grieving process. My hope for this capstone is to facilitate acceptance and understanding of neurodivergence, to help ND individuals fully claim their identity, to help remove internalized shame, and to improve ND individuals' quality of life. The analogy "I am a normal zebra, not a strange horse" is particularly helpful for understanding my goal with this research, which is to demonstrate to therapeutic practitioners that NT goals, techniques, and solutions are not the one size fits all solutions many believe them to be. I truly believe that through the application of this neuro-affirming lens in therapy we can maximize benefit and minimize harm.

Definition of Terms

To ensure clarity and understanding of this work, it is necessary to define a few terms.

Attention-Deficit/Hyperactivity Disorder

Attention-deficit/hyperactivity disorder (ADHD) is categorized in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., text rev.; DSM-5-TR; APA, 2022) as a neurodevelopmental disorder. Diagnostic criteria include symptoms related to inattention, hyperactivity, and impulsivity (APA, 2022). Lived experience goes beyond symptoms listed.

Autism Spectrum Disorder

Autism spectrum disorder (ASD) is also categorized in the DSM-5-TR as a neurodevelopmental disorder (APA, 2022). Diagnostic criteria include symptoms related to social interactions and restricted or repetitive behaviour or interests (APA, 2022). Lived experience goes beyond symptoms listed.

Neuro-Affirming

Neuro-affirming (used synonymously with neurodiversity-affirming, diversity-affirming, disability-affirming, ADHD-affirming, and ASD-affirming) relates to the idea that differences need not be considered deficits. Using a neuro-affirming lens challenges the concept of hegemonic cognitive normality (which has led to harmful tenets such as eugenics or “curing” neurodivergence) and shifts the focus from pathology to neurodivergent wellbeing (Bertilsdotter Rosqvist et al., 2020). Neuro-affirming practices include creating inclusive environments, recognizing strengths, tailoring supports, accepting differences, and empowering people.

Neurodivergent & Neurotypical

Neurodivergent (ND) and neurotypical (NT) are terms coined in 1998 by Judy Singer as a part of the Autistic Rights Movement to address the biased language of normal/abnormal (Doyle, 2022). The term ND is used to discuss diagnoses, such as ADHD or ASD, in a nonpathologizing way that does not frame neurodevelopmental conditions as a problem (Villines & Lener, 2022). The use of the term NT rather than “normal” helps to address the inherent bias in the assumption there is an ideal version of normal cognitive functionality rather than a diverse range of normal cognitive functionality.

Capstone Outline

The purpose of this capstone is to advocate for a paradigm shift in therapeutic practices that aligns with a neuro-affirming framework, which prioritizes acceptance and understanding. Current therapeutic practices often fail to meet the needs of ND clients due to a reliance on outdated models that pathologize neurodivergence, focus on conformity, and neglect identity-affirming approaches (Chapman & Botha, 2022; Chapman & Bovell, 2020). By exploring barriers to treatment and examining the flaws in traditional therapeutic practices, this capstone aims to demonstrate how adopting this neuro-affirming framework can improve therapeutic outcomes, build trust, and empower ND individuals.

In chapter two, the application of this neuro-affirming framework across various therapeutic modalities is examined. Differences in therapeutic outcomes based on use or neglect of the neuro-affirming lens are discussed across a variety of therapeutic modalities including applied behaviour analysis (ABA), acceptance and commitment therapy (ACT), solution focused therapy (SFT), motivational interviewing (MI), cognitive behavioural therapy (CBT), dialectic behaviour therapy (DBT), narrative therapy, and family therapy.

Chapter three contains a discussion of the research into the various therapeutic modalities and the limitations of their findings. A discussion on how to apply the neuro-affirming lens in therapeutic practice is followed by a demonstration of the effectiveness of its application through five short case conceptualizations. Practical and educational improvements for mental health professionals are also suggested. Various neuro-affirming therapeutic techniques, such as psychoeducation, mindfulness and somatic approaches, and interest- and strength-based approaches are explored. Neuro-affirming ethical considerations are identified. Reflections on personal learning are penultimately discussed before the conclusion of this capstone.

This capstone aims to contribute to a positive transformation of the field of counselling by encouraging the adoption of the neuro-affirming framework.

Chapter Two: Literature Review

Overview of the Current State of the Research

As previously summarized, current mental health practices underserve ND populations due to an overreliance on pathologizing neurodivergence, identity separation, and treatments focused on symptom reduction (Pantazakos, 2023). These harmful practices can undermine therapeutic progress and outcomes, negatively impact quality of life and self-acceptance, and can reinforce feelings of inadequacy, conformity above comfort, and effortful practices like masking (Pantazakos, 2023). Despite research showing that ND individuals' wellbeing is strongly correlated with acceptance, there is little to no recognition that there is a problem with current therapeutic practices, let alone an effort made to change them (Pantazakos, 2023). The consequences of this disparity result in lack of effective treatment options, which negatively impacts ND individuals in several ways and underscores the importance of addressing systemic barriers by implementing a neuro-affirming lens (CADDAC, 2019). Untreated ADHD has been linked to an “increased risk of mood and anxiety disorders, substance abuse disorders, transportation accidents, suicides, injuries, teenage pregnancies, unemployment, underemployment, and incarceration” (CADDAC, 2019, p. 4). Alarmingly, a recent study found untreated ADHD adults also have a reduced life expectancy, 6.78 years for males and 8.64 years for females (O’Nions et al., 2025). This reduction in life expectancy was linked to “modifiable risk factors and unmet support and treatment needs in terms of both ADHD and co-occurring mental and physical health conditions” (O’Nions et al., 2025, p. 1). Despite this evidence outlining the consequences of poor treatment or lack of treatment, pathologization of neurodivergence continues. The general lack of enquiry or interest in adapting mental health practices to meet ND needs is highly problematic (Pantazakos, 2023).

This capstone was written to address this problematic lack of enquiry. Thus, I pose the following research question: would simply shifting the paradigm of understanding surrounding neurodiversity help effect change and improve treatment outcomes for ND individuals?

In this chapter, I review various therapeutic modalities commonly used with ND individuals to determine if a simple perspective shift, application of the neuro-affirming lens, would improve ND individuals' wellbeing. Not only do I critically analyze the results of these studies, but I also evaluate the methods and outcome measures to determine if the statistically significant "successes" being reported truly benefit ND individuals or simply reflect neuro-normative assumptions. It is important to consider the framework with which research is conducted to determine the validity of their results. Posing thoughtful questions and engaging in critical analysis of the research to determine framework, aim, and outcome measures, can help me ascertain the validity and reliability of the results. Through utilizing a neuro-affirming lens as I explore the research, I can evaluate whether current practices are meeting ethical standards of care for ND individuals and whether the neuro-affirming framework benefits ND clients. I can also evaluate which modalities are best suited for use with ND individuals, and which can be easily adapted to use the neuro-affirming framework. I can also determine which modalities are less suitable and less adaptable. This analysis lays the groundwork for later discussions on how to apply the neuro-affirming lens to therapeutic practice, which could benefit ND individuals by ensuring acceptance and holistic wellbeing are prioritized over neuro-normalization.

Therapeutic Modalities

Various therapeutic modalities have been used with ND individuals, some with more success than others. Some modalities, such as CBT, DBT, and narrative therapy, have integrated cultural competence which allows them to be used with ND individuals very effectively

(Pantazakos, 2023; Prochaska & Norcross, 2018). Others, such as ABA, rely on neuro-normative conceptualizations, goals, techniques, and outcome measures, that when utilized with ND populations do more harm than good (Chapman & Botha, 2022). Other modalities, such as SFT, MI, ACT, and family therapy, can be easily adapted to use the neuro-affirming lens to great effect (Dogan, 2023; Hsu et al., 2021; Ma et al., 2018; Seery et al., 2023). Review of these studies can demonstrate how the neuro-affirming lens can be applied effectively by contrasting studies that utilize neuro-normative perspectives. In this section, I review the various modalities to determine if the studies that utilize the neuro-affirming lens demonstrate increased treatment effectiveness, thus helping to answer the question: does shifting the paradigm of understanding surrounding neurodiversity improve ND individuals' wellbeing?

ABA & ACT

The core goal of ABA is behaviour change, increasing desired behaviours and decreasing interfering ones (Garey & Lord, 2024). With roots in behaviourism, the focus of applying ABA in ND populations is on modifying maladaptive behaviours and improving communication and language, social skills, self-care (such as showering and toileting), play and leisure, motor skills, and learning and academic skills (Garey & Lord, 2024). One study found that ABA techniques “worked well to manage the behaviour of a child with ADHD” (Dorji, 2021, p. 46). Research has shown that ABA techniques are beneficial in classroom management of ND children because they can improve inattention and hyperactivity and decrease inappropriate classroom behaviours (Dorji, 2021). However, these improvements were based on external observations and the children's mental health was never measured (Dorji, 2021). This is a clear example of how neuro-normative goals can be misleading when it comes to interpreting research outcomes and determining the effectiveness of certain techniques. On the surface, building skills and

reinforcing “desirable” behaviours seem to be positive goals, however critics state that ABA is too focused on eliminating behaviours instead of building skills and that ABA is not aimed at enabling independence but eliminating ND traits (Garey & Lord, 2024). ABA was designed as an early autism intervention; however, critics have said ABA focuses on neuro-normalisation at the expense of Autistic thriving and wellbeing, and it often addresses behaviours which Autistic people themselves find nonproblematic (Chapman & Botha, 2022). ABA therapy has been criticized for rewarding Autistic children for engaging in activities that make them more “normal” (Chapman & Botha, 2022). “If any disvalue of ASD stems from societal forces, placing the full burden of rectifying this situation on autists is unjust” (Chapman & Bovell, 2020, p. 1535). For many, the damaging and prejudicial implications of this therapy annul any potential benefit. While this therapy was specifically designed for Autistic people, its failure to provide benefit for ND people raises important questions about what kinds of therapy are helpful, for whom, and for what purpose (Chapman & Bovell, 2020).

While some supporters of modern ABA believe that applying a neuro-affirming lens to ABA could provide beneficial skill-building for ND individuals without relying on neuro-normative goals or behaviours, others believe that this change would fundamentally change the goals of ABA, thus rendering any such modifications a different modality altogether (Chapman & Bovell, 2020). Disability-activists advocate for the complete abandonment of utilizing ABA with ND individuals in favour of a utilizing a “neurodivergent informed therapy (NIT) that resists default normalisation, is sensitive to neurodivergent perspectives, understands disablement as relational and political, and considers disability something to be a potential source of community and pride” (Chapman & Botha, 2022, p. 317). One such NIT option could be ACT. ACT is a mindfulness-based behavioural therapy that helps individuals develop

psychological flexibility by accepting their thoughts and feelings while committing to actions that align with their values, rather than trying to control or suppress difficult experiences (Gladding & Alderson, 2016). ACT, when used like ABA with goals such as reducing problem behaviours and increasing performance, has been shown to be ineffective in improving the wellbeing of ND individuals (Garcia et al., 2021; Munawar et al., 2021). When ACT instead focuses on reducing psychological distress and promoting acceptance, it can be used effectively in ND populations, especially during periods of high stress such as a global pandemic (Fullen, Galab, et al., 2020).

One study utilized the Understanding and Managing Adult ADHD Programme (UMAAP), an online intervention that combines ACT and psychoeducation, to improve self-compassion, self-acceptance, and self-esteem in ADHD adults (Seery et al., 2023). Of the 157 Irish, English-speaking adults who attended the UMAAP, 49 participated in both the baseline and feedback survey. The online survey, comprised of open-ended questions, revealed that UMAAP participants believed the program positively impacted their outlook on themselves and their relationship with their thoughts and behaviours. One highlight of this study is that the authors took the time to consider if the intervention was suitable for ADHD brains and how they could adapt it to improve elements like information overload, engagement, attendance, and homework completion.

The study found that the UMAAP was able to improve ADHD adults' self-understanding and self-awareness, self-acceptance and self-compassion, and self-actualization and motivation (Seery et al., 2023). Participants were able to learn new techniques and information about ADHD that resulted in a deepened knowledge of themselves. Participants were also able to “reframe frustrations and disappointment from self-derision to acceptance and self-compassion” (Seery et

al., 2023, p. 258). Participants learned they were not broken or unwanted, but simply different and still worthy of love.

One strength and limitation of the study was the online nature of the program, while this allowed for increased flexibility and attendance, it did limit engagement (Seery et al., 2023). ADHD symptoms were not verified using screening scales such as the Adult ADHD Self-Report Scale (ASRS), instead participants self-reported their ADHD status; a valid form of diagnosis due to barriers to services. Collecting demographic information, beyond age and gender identity, such as ethnicity, education level, and employment status, could have provided further context for the authors' findings and helped further tailor the intervention.

Overall, this study demonstrated a strong use of the neuro-affirming lens (Seery et al., 2023). Neuro-affirming ACT, which accepts and affirms neurodivergence, has been shown to increase understanding of neurodivergence, improve self-acceptance, and positively impact ND individuals' outlook of themselves and their relationship with their thoughts and behaviours (Seery et al., 2023).

The development of NITs will need to involve collaboration between NT and ND people and will require “*mutual and reciprocal* conversation and behaviour change” (Chapman & Bovell, 2020, p. 1535). NITs would have a built-in neuro-affirming lens contrasting the built-in neuro-normative lens in ABA (Chapman & Botha, 2022). Future research should focus on cultivating neurodivergent pride and affirmation in therapeutic practice to enable ND thriving and flourishing rather than neuro-normalisation (Chapman & Bovell, 2020).

SFT & MI

SFT or solution-focused brief therapy (SFBT) and MI are modalities that focus on externalizing the problem, determining readiness for action, and finding strength-based solutions

to problems (Gladding & Alderson, 2016). These modalities focus on empowerment and autonomy and rely on the clients' pre-existing strengths (Gladding & Alderson, 2016). Often, approaching the use of these modalities with the neuro-normative goal of symptom elimination proves ineffective, because neurochemical differences cannot be altered by effort or willpower alone (Chapman & Botha, 2022). By adopting a neuro-affirming perspective, therapists can help ND clients capitalize on their unique strengths and employ neuro-affirming tools and strategies to address various challenges (Chapman & Botha, 2022). This paradigm shift to understanding and acceptance could be the difference between positive outcomes and stagnation.

One meta-analysis, which analyzed 20 studies focused on behavioural problems in children and adolescents, found that SFBT was more effective at addressing externalizing rather than internalizing behaviours (Hsu et al., 2021). Externalizing behavioural problems such as aggression, hyperactivity, impulsivity, and conduct problems are more visible and can lead to conflict with others, disciplinary actions, and legal problems (Hsu et al., 2021). Internalizing behavioural problems such as anxiety, depression, social withdrawal, somatic complaints, and low self-esteem are invisible and can lead to significant emotional distress, potential self-harm, and difficulties in social and academic functioning (Hsu et al., 2021).

Results from the 1,404 participants across the 20 studies revealed that SFBT was overall effective for treating externalized behavioural problems in children and adolescents, common in unmanaged ADHD (Hsu et al., 2021). Some of the significant long-term consequences of externalizing behaviours include social service utilization and criminal justice involvement (Hsu et al., 2021). While this type of SFBT intervention focused on externalized behaviour does benefit the ND individual, it does nothing to address the internalized behavioural problems, which also can have long-term consequences, such as self-harm and suicide (Hsu et al., 2021).

This is why it is critical that therapeutic goals are adapted to address all the needs of the ADHD individual, not just the needs of secondary observers, such as parents, teachers, or taxpayers (Chapman & Botha, 2022; Dougan, 2023).

One neuro-affirming study aimed to fill this gap in the literature by investigating the effect of the solution-focused approach on self-efficacy and self-esteem in Turkish adolescent ADHDers (Karakaya & Özgür, 2019). A strength of this study was its research design, including data collection and analysis. This study used a mixed qualitative/quantitative research design, identified participant characteristics including education level of the participants and their parents, and their family situation (nuclear or divorced), and psychostimulant drug use, and conducted a 12-week follow-up interview. When used with cultural competence and a neuro-affirming lens, SFBT has been shown to significantly improve self-efficacy and self-esteem in ADHD individuals (Karakaya & Özgür, 2019).

When the symptom-related behaviour of ADHD teens is viewed as a problem to be solved, MI has led to increased arguing, anger, and verbal hostility (Barkley, 2018). Thus, previous research has shown MI, which focuses on symptom-related behavioural problem solving, is ineffective when used with ADHD individuals (Sibley et al., 2020; Sibley et al., 2021). However, research demonstrated that when MI was used to address alcohol use in ADHD individuals, there was a significant reduction in alcohol-related negative consequences (Meinzer et al., 2021).

ADHD college students are at particularly high risk for experiencing alcohol-related negative consequences relative to their NT peers (Meinzer et al., 2021). A study on ADHD college students with alcohol-related problems found that brief MI (BMI) with behavioural activation (BA) was more effective at decreasing alcohol-related negative consequences than

BMI with supportive counselling (SC) in participants with higher baseline depressive symptoms (BMI+BA > BMI+SC; Meinzer et al., 2021). The opposite was true in participants with lower baseline depressive symptoms (BMI+SC > BMI+BA). Outcomes for the 113 participants were assessed using the Brief Young Adult Alcohol Consequences Questionnaire, Daily Drinking Questionnaire, Barkley Functional Impairment Scale, and Beck Depression Inventory at baseline and 1- and 3- month follow-ups.

ADHD is associated with higher rates of relapse and addiction treatment discontinuation (Luderer et al., 2021). As such, early intervention is important (Özgen et al., 2021). One study found that integrated CBT and MI can help ADHD individuals with substance use disorder (SUD) develop coping strategies, improve impulse control, and manage addictions (van Emmerik-van Oortmerssen et al., 2019). This study, with 119 ADHD adult participants in Amsterdam, Netherlands, found that integrated CBT/MI not only improved reduction of substance use, but also symptoms of depression and anxiety, negative ADHD-related traits, and quality of life. The integrated CBT/MI intervention consisted of “15 individual sessions of motivational therapy, coping skills training and relapse prevention for SUD, and training of planning skills, problem-solving skills and dealing with emotions for ADHD” (van Emmerik-van Oortmerssen et al., 2019, p. 28). This integration of modalities can help overcome issues with early treatment drop-out rates when each modality is applied individually (Wilens & Kaminski, 2018). MI techniques focused on acceptance, understanding, and interest-based motivation would likely be more effective in helping ADHD individuals than neuro-normative applications (Dogan, 2023).

CBT & DBT

Cognitive therapy (CT) and subsequently CBT were developed in the 1960s by Aaron Beck (Gladding & Alderson, 2016). CT/CBT focuses on the connection between thoughts, feelings, and behaviours (Gladding & Alderson, 2016). In the 1970s, Marsha Linehan developed DBT which is based on CBT but is specifically adapted for people who experience emotions very intensely (Gladding & Alderson, 2016). DBT is the first therapy to demonstrate effectiveness in treating borderline personality disorder (BPD; Gladding & Alderson, 2016). These are two of the most well-studied approaches to psychotherapy and as a result, there are numerous studies supporting their effectiveness at treating ND clients (Pantazakos, 2023). CBT has been shown to be effective in improving executive functions, reducing avoidance and procrastination, improving self-esteem, and reducing anxiety and aggression in ADHD adults and children (Hassani et al., 2021; Pan et al., 2019; Young et al., 2016). DBT has been shown to decrease the severity of hyperactive and impulsive symptoms and have a significant positive effect on core symptoms of ADHD, including emotional dysregulation and functional impairment (Fullen, Jones, et al., 2020; Meyer et al., 2022).

One study on 228 Australian children found that CBT was an effective treatment for comorbid anxiety in ADHD children (Sciberras et al., 2019). After completing a 10-session CBT intervention (Cool Kids), ADHD children found their anxiety symptoms, ADHD severity, behaviour, quality of life, sleep, cognitive functioning, and school attendance had improved and continued to show improvements at the 5- and 12-month follow-ups.

CBT and DBT are incredibly effective modalities with built-in techniques that can benefit ND clients (Halmøy et al., 2022; Pantazakos, 2023). CBT techniques, like cognitive restructuring, and DBT techniques, like emotion regulation and distress tolerance, can help ND

individuals better manage cognitive distortions such as all-or-nothing thinking, regulate emotions and behaviours, address relationship issues and overcome communication differences, deal with masking and self-esteem issues, help achieve goals, maintain accountability, and overcome internalized stigma (Prochaska & Norcross, 2018).

A meta-analysis reviewing 53 papers with the aim of examining the evidence base for psychological treatments for ADHD management in adulthood found that CBT, DBT, and mindfulness were all effective interventions for the core symptoms of ADHD (Fullen, Jones, et al., 2020). This meta-analysis was focused on neuro-normative outcome measures, such as symptom reduction, despite the papers it reviewed covering a wider range of outcome measures, including neuro-affirming ones, such as emotion regulation and self-compassion. The authors summarized the CBT interventions from the 23 CBT-focused papers included in the meta-analysis that were relevant to living with a diagnosis of ADHD, such as goal attainment, interpersonal skills, coping strategies, problem solving, cognitive restructuring, distraction avoidance, motivation, executive functioning, organization, time management, and planning. The authors concluded that CBT was an effective intervention for primary (inattention, hyperactivity/impulsivity) and secondary (psychosocial) outcome measures. Despite noting that the DBT and mindfulness interventions helped improve emotional dysregulation, relationship difficulties, maladaptive thoughts, self-awareness, and self-acceptance, the authors chose to focus on the positive effects that DBT and mindfulness had on the core symptoms of ADHD. While it is beneficial to target ADHD traits that are negatively impacting individuals' lives, Fullen, Jones, et al. (2020) could have further benefitted from applying a neuro-affirming lens to their research aim.

Two studies on the effectiveness of DBT in ADHD individuals utilized two different frameworks, neuro-normative (Meyer et al., 2022) and neuro-affirming (Halmøy et al., 2022). Both studies found DBT to be an effective intervention for ADHD individuals, however, the aims and outcome measures differed.

The neuro-normative study's aim was identifying which ADHD adolescents would benefit from a structured skills training group (SSTG) based on DBT (Meyer et al., 2022). Of the 71 participants, those who self-perceived pronounced symptoms of impulsivity/hyperactivity, conduct problems, and/or impairment of emotional dysregulation saw the most benefit from the SSTG. The authors did mention that a limitation of this study was that further adaptations of the SSTG would be needed to create evident improvements of functioning in daily life.

The neuro-affirming study's aim was to determine if a DBT-based group treatment (DBT-bGT) would improve executive functioning and emotional regulation in ADHD adults (Halmøy et al., 2022). This study mentioned that SSTGs have had beneficial effects on core symptoms of ADHD in adults but wished to fill the gap in the research when it came to the impact of DBT on improving ADHD adults' quality of life. The 104 participants who completed the DBT-bGT during the 14-week randomized controlled trial saw improvements, that persisted at the 6-month follow-up, in executive functioning (measured by the Behavior Rating Inventory of Executive Function [BRIEF-A]), self-reported ADHD-symptoms, depressive symptoms, and quality of life. Emotion regulation (measured by the Difficulties in Emotion Regulation Scale [DERS]) and anxiety symptoms improved nonsignificantly but notably continued to improve at the 6-month follow-up. Participants in the control group (treatment as usual [TAU]) were subsequently offered DBT-bGT. The results of this study show that utilizing a neuro-affirming framework in research can highlight the effectiveness of therapeutic interventions like DBT not

only for helping manage core symptoms of ADHD, but also for reducing executive dysfunction and improving quality of life in ADHD individuals.

Even when therapists utilize neuro-normative goals or fail to adapt techniques to be explicitly neuro-affirming, utilizing CBT and DBT can still result in positive mental health outcomes for ND individuals (Fullen, Jones, et al., 2020; Hassani et al., 2021; Meyer et al., 2022; Pan et al., 2019; Pantazakos, 2023; Young et al., 2016). In addition to CBT and DBT being shown to be effective in reducing ADHD symptoms (Fullen, Jones, et al., 2020; Hassani et al., 2021; Meyer et al., 2022; Pan et al., 2019; Pantazakos, 2023; Young et al., 2016), studies have shown that CBT and DBT are effective in treating depression and anxiety (Halmøy et al., 2022; Haydicky et al., 2013; Pantazakos, 2023). Meta-analytic evidence suggests that CBT is effective for treating anxiety and depression in ASD individuals (Pantazakos, 2023). Similarly, CBT has been shown to be effective in treating depression and anxiety in ADHD adolescents, but less effective in eliminating ADHD behaviours (Haydicky et al., 2013). DBT has shown particular promise in helping ND clients achieve positive therapeutic outcomes (Halmøy et al., 2022). Emotion dysregulation is one of the symptoms associated with ADHD and ASD. As such, DBT, which was specifically designed to help with intense emotions, is a routine choice for use with ND clients (Halmøy et al., 2022). Similarities between BPD and ADHD (i.e., impulsivity, emotional instability, and disorganized behaviour) indicate that DBT can be an effective approach for ADHD (Halmøy et al., 2022).

When neuro-affirming goals, such as understanding and acceptance, are utilized in conjunction with CBT and DBT modalities, and techniques such as active mindfulness are adapted to be neuro-affirming, outcomes for ND individuals drastically improve (Haydicky et al., 2013). Mindfulness exercises that are adapted from NT standards (i.e., sitting still, calm

breathing exercises, etc.) to more active mindfulness practices (i.e., walking, active mindfulness exercises, etc.) to suit ND needs result in much more effective adoption of mindfulness practices and thus improved therapeutic outcomes in ND clients (Haydicky et al., 2013). Behavioural therapies reward “positive behaviour.” Therefore, the effectiveness of CBT and DBT modalities is dependent on the definition of positive behaviour. One study found utilizing a neuro-normative definition of positive behaviour resulted in over-adaptation or masking and an overall collapse of mental health in ND clients (Pantazakos, 2023). If the therapeutic goals are neuro-affirming, such that they focus on understanding and acceptance, therapeutic outcomes have been found to be much more successful (Pantazakos, 2023). One neuro-affirming study found that group DBT was successful in reducing executive dysfunction symptoms and in improving quality of life in ADHD adults (Halmøy et al., 2022). This study showed promise as a neuro-affirming therapeutic treatment option because it focused on improved quality of life outcomes rather than improved neuro-normative behavioural outcomes. One of the main goals of applying group DBT in this study was to encourage developing coping strategies and learning to live with and manage symptoms rather than symptom reduction. This evidence supports the effectiveness of the paradigm shift because even when outcomes utilizing the neuro-normative framework already demonstrate effectiveness, utilizing the neuro-affirming framework demonstrates more significant improvements in ND client outcomes (Halmøy et al., 2022; Pantazakos, 2023). While CBT and DBT are already effective modalities for working with ND individuals, applying a neuro-affirming lens can only further improve outcomes (Halmøy et al., 2022; Pantazakos, 2023).

Narrative Therapy

Narrative therapy allows clients to learn to value their own life experiences and stories through re-authoring how they conceptualize and interpret the world (Gladding & Alderson, 2016). Narrative therapy focuses on deconstructing old, harmful narratives and reauthoring new, less distressing ones (Prochaska & Norcross, 2018). The four primary techniques of narrative therapy are constructing the narrative, externalizing the problem, deconstruction, and re-authoring (Prochaska & Norcross, 2018). In addition to helping alleviate blame and guilt, narrative therapy is also beneficial for helping clients re-externalize internalized discrimination (Prochaska & Norcross, 2018). Cultural competence, unconditional positive regard, understanding, and acceptance are key components of effective narrative therapy (Prochaska & Norcross, 2018).

Without understanding and acceptance of cultural differences, including neurodiversity, therapists using narrative therapy can accidentally reinforce harmful narratives (Prochaska & Norcross, 2018). Narrative therapy utilizing a neuro-affirming framework has been shown to be particularly effective in ADHD women, especially those who were diagnosed late and who are dealing with unmasking (Morrison, 2020). This is likely due to neuro-affirming narrative therapy allowing ND individuals to accept their differences in a way society disallows (Morrison, 2020). Narrative therapy has been shown to reduce fear and anxiety, improve relationships with others, increase self-perception, and decrease behaviour problems in children with ADHD (Bayat et al., 2018; Fatahi et al., 2021).

One study with the aim of determining the effectiveness of narrative therapy on reducing behaviour problems and improving self-perception in students found that narrative therapy was effective at decreasing attentional deficits and social anxiety and increasing academic self-

efficiency and self-perception in ADHD students (Fatahi et al., 2021). The study was a quasi-experimental study with pretest-posttest control group design that included 30 fourth-grade male students from Shiraz, Iran. However, due to a lack of long-term follow-up and gender and age diversity, the reliability and generalizability of the study cannot be assured. The experimental group (15 students) underwent twelve 60-min sessions of narrative therapy where they learned to improve interpersonal communication skills, to recognize their positive and negative emotions, and to control their feelings towards themselves and others, thus enhancing their emotional compatibility and peer relationships. This improved relational capacity allowed the children to create positive patterns in their lives, improve their self-perception, and as a result, improve their quality of life (Fatahi et al., 2021). This study demonstrated positive results in addressing both ADHD-related issues and improving wellbeing.

Narrative therapy allows ND clients to reflect on feelings of helplessness, blame, shame, guilt, and negative self-worth (Jagatdeb et al., 2024). Neuro-affirming narrative therapy allows ND clients to deconstruct societal narratives that put them at fault, and re-author stories that align with their own values, skills, and strengths (Jagatdeb et al., 2024). The qualitative conclusions from this paper were drawn from the therapeutic work of three narrative practitioners working with Indian youth (Jagatdeb et al., 2024). The three stories focused on re-authoring violence and abuse without re-traumatization, de-pathologizing LGBTQIA+ identities, and deconstructing the ADHD diagnosis. Neuro-affirming narrative therapy can help de-pathologize an ADHD or ASD diagnosis and allow ND clients to work through any experiences of violence and abuse, due to neuro-normalization or not, without re-traumatization (Jagatdeb et al., 2024).

In another case study, the successful application of prolonged exposure (PE) narrative therapy for a client with diagnoses of ADHD, posttraumatic stress disorder (PTSD), and

generalized anxiety disorder (GAD) illustrated a positive synergy between psychostimulant treatment and PE (DiBacco & Gaynor, 2021). Subjective units of distress and self-report data from the client's written narrative responses revealed that the client's anxiety response to the in vivo exposure sessions lowered each week and the client was able to maintain focus on her treatment due to her psychostimulant medication. The authors of this case study suggested clinicians should be prepared to adjust treatment approaches for ND clients. Accommodations the authors recommended to help ND clients maintain focus and engagement included: taking frequent breaks, shortening activity lengths, providing written instructions and trauma narratives, and increasing stimulation of session content, such as through speaking aloud. This case study underscores the neuro-affirming framework's holistic approach, which embraces neurodivergence as an inherent aspect of identity by adapting the trauma therapy with neurodiversity in mind and integrating medication and accommodations to achieve meaningful therapeutic success and overall quality of life enhancement (DiBacco & Gaynor, 2021).

In a scoping review of 67 papers, Boodoo et al. (2022) found that there is a significant link between ADHD and childhood trauma. As such, it is critically important that neuro-affirming, trauma-informed, evidence-based psychosocial interventions be considered the first-line treatment (Boodoo et al., 2022). Narrative therapy has been shown to be effective in treating trauma in ND populations (Boodoo et al., 2022; DiBacco & Gaynor, 2021; Jagatdeb et al., 2024; Morrison, 2020; Sloan & Marx, 2019; Sloan et al., 2023). There is a bidirectional relationship that exists between trauma-related disorders and ADHD (Boodoo et al., 2022). Both trauma and ADHD predispose individuals to the development of the other condition and worsen the severity of the other condition (Boodoo et al., 2022). As such, when working with traumatized ND individuals, it is critical that therapists use both trauma-informed and neuro-affirming care that

considers ND individuals' unique brain functioning and past experiences (Morrison, 2020).

Written exposure therapy (WET) is a narrative approach that allows ND individuals to write down thoughts, emotions, and experiences (Morrison, 2020). The process of writing can help ND individuals slow down their thought processes, challenge impatience, impulsivity, and alexithymia, and allow ND individuals to process and reframe their thoughts, emotions, and experiences (Morrison, 2020). Writing can help externalize the internalized, which has been shown to be an effective therapeutic technique for ND individuals (Jagatdeb et al., 2024).

Neuro-affirming factors like brevity (WET typically requires only five sessions to be effective), attention aids (such as body-doubling and modeling), and lack of homework (which ND individuals often struggle to complete), further demonstrate how effective narrative therapy can be with ND individuals (Morrison, 2020; Sloan & Marx, 2019). Additionally, studies have shown that narrative therapeutic techniques, such as WET and PE therapy, have substantially lower treatment dropout and attrition rates in ND individuals than cognitive processing therapy (CPT; Sloan et al., 2023; Thompson-Hollands et al., 2019). This is likely due to the neuro-affirming nature of narrative therapy which helps foster understanding and acceptance and improve treatment outcomes (Sloan et al., 2023; Thompson-Hollands et al., 2019).

Narrative therapy can help de-pathologize neurodivergence, help treat co-morbid trauma without re-traumatization, address ADHD-related issues, and improving wellbeing (Fatahi et al., 2021; Jagatdeb et al., 2024). Narrative therapy is one of the modalities with a neuro-affirming lens built in (Morrison, 2020). Further cultural competence that fosters understanding and acceptance can only serve to improve ND outcomes using narrative therapeutic techniques (Morrison, 2020).

Family Therapy

Family therapy focuses on creating stronger, healthier emotional bonds between family members (Gladding & Alderson, 2016). Historically, family therapy research has focused on correcting ND children's "problem behaviours" and reducing parental stress rather than focusing on collaborative communication and reducing family conflict (Manassis, 2005). Despite anti-medication fearmongering prevalent at the time, stimulant medication was preferred over parent training as a treatment method for ADHD (Manassis, 2005).

Fortunately, over time, society has gained a better understanding of neurodivergence and effective therapeutic supports. For example, in 2013 both ASD and ADHD could be diagnosed together for the first time, as previously a diagnosis of one was considered as exclusion criteria for the other (APA, 2013). One ex post facto study on family functioning and parental bonding during childhood found that family functioning and parenting style had a significant negative impact on ADHD adults including low self-esteem, self-control problems, and relationship problems (Montejo et al., 2015). The results from the 100 Spanish participants showed that families with ADHD members were dysfunctional with a rigid-disengaged typology and parental bonds based on control without affection. The controlling, forceful parenting styles in response to impulsive behaviour and the weak emotional ties and rigidity were associated with low care and overprotection which resulted in cyclic negative family functioning. A longitudinal design would have increased the reliability and validity of this study as relying on memories of ADHD individuals may yield biased results due to poor executive functioning and working memory (Montejo et al., 2015). Additionally, selecting participants from the general population rather than a specialized university hospital program would have increased generalizability (Montejo et

al., 2015). Despite the limitations, this study showed that parent training would be beneficial in helping manage ADHD and improve familial relationships.

Neuro-affirming family therapy, where therapeutic goals are focused on improving understanding, awareness, and acceptance of ND differences, proved to be effective in reducing family conflict and resulted in many positive mental health outcomes (Robin, 2014). Family therapy that prioritized psychoeducation about ND strengths, such as creativity and problem-solving, and ND differences, such as communication and processing, produced better overall mental health outcomes, improved family cohesion, and lessened familial conflict (Robin, 2014). In one study, Robin (2014) outlined a program focused on improving parental behaviour through teaching principles of neuro-inclusivity, communication, and collaborative problem-solving, which in turn improved the familial relationship. Robin's program found a combination of behaviour management training (BMT) and problem-solving communication training (PSCT), in addition to medication, to be the most effective in improving the family dynamic for families with ADHD teens.

However, research has found that family therapy with the goal of "correcting" ND behaviour was ineffective (Ogundele & Ayyash, 2023). One meta-analysis found that behavioural therapies aimed at ameliorating ADHD symptoms were ineffective because the behavioural "improvements" they were aiming for were neuro-normative and resulted in increased masking behaviours, increased self-esteem issues, and the increased likelihood of ND children developing depression or anxiety (Ogundele & Ayyash, 2023). The authors reviewed 41 papers with the aim of finding psychological treatments that could help improve ADHD symptoms and related functional impairments. The authors found that the most effective evidence-based strategies for controlling ADHD core symptoms were a combination of stimulant

medications and behavioural therapy (BT), CBT, and group-based parental psychoeducation. The authors found that other interventions such as mindfulness, neurocognitive training, exercise, and social skills groups were effective at improving familial relationships, communication, social skills, academic performance, emotion regulation, and executive functioning skills, but had limited evidence supporting their effectiveness at reducing ADHD-related symptoms. The authors, disappointed in the lack of effective treatment options, may have overlooked effective interventions because their aim was neuro-normative behaviour management rather than improved understanding, acceptance, and quality of life (Ogundele & Ayyash, 2023).

In one particularly ground-breaking study, children's perspectives on multiple family therapy (MFT) were examined, which presented five positive outcome themes: "(a) full of fun; (b) building friendships through common experiences; (c) a happy family time; (d) safe space; and (e) positive parental responses and communications" (Ma et al., 2018, p. 1). The 43 Chinese families with ADHD children in the experimental group completed a 42-hour MFT program, while the 45 Chinese families with ADHD children in the control group attended 2 writing classes, that were similar to those of the MFT program, scheduled 3 months apart. Assignment to experimental or control group was based on the families' motivation and time availability rather than on randomization which could impact the reliability of the results (Ma et al., 2018). Outcome measures were collected using the Perceived Competence Scale (PCS), the Children's Hope Scale (CHS), the Parent-Child Relationship Scale (PCR), and the Student Social Support Scale (SSSS). The reason this research into children's perspectives is so ground-breaking is that the majority of all studies of family therapy involving ND children use parental report measures as markers of improvement rather than self-report measures, which skews the goals of

“successful” treatment towards neuro-normative standards (Ma et al., 2018). The multi-family format of this therapy was particularly effective for the families involved as it gave the ND children a safe space to un-mask, be themselves, and make friends while also giving the parents a chance to learn about neurodiversity and improve communication, understanding, and acceptance. One poignant observation stated family life organized around symptoms does not leave sufficient time or energy to meet the family’s true needs. This implies the “fix” for neurodiversity that researchers have been looking for is focusing more on interpersonal connections and acceptance rather than a “cure” for the symptoms.

Family therapy utilizing the neuro-normative lens focuses on addressing the child’s problematic behaviours whereas the focus of family therapy utilizing the neuro-affirming lens is on increasing understanding and acceptance and creating a healthy environment for everyone (Ma et al., 2018; Ogundele & Ayyash, 2023; Robin, 2014). Family therapy that utilizes a neuro-affirming approach focuses on wellbeing improvements in addition to behavioural improvements which results in significant positive mental health outcomes for ND families (Ma et al., 2018; Ogundele & Ayyash, 2023; Robin, 2014).

Conclusion

Reviewing literature about the various therapeutic modalities can help shed light on whether shifting the paradigm of understanding surrounding neurodiversity can improve ND individuals’ wellbeing. Analysis of aims and outcome measures revealed which research utilized which framework. Identifying the research framework was an important step in determining the validity and reliability of the research. Research utilizing both frameworks claimed to have statistically significant results (Dorji, 2021; Garey & Lord, 2024; Halmøy et al., 2022; Haydicky et al., 2013; Hsu et al., 2021; Ma et al., 2018; Ogundele & Ayyash, 2023; Pantazakos, 2023;

Prochaska & Norcross, 2018; Robin, 2014; Sibley et al., 2020; Sibley et al., 2021). However, the definition of successful outcome was impacted by the lens utilized in the research. Definition of success could be either a strength or limitation of the research depending on which framework was used. Research conducted using a neuro-normative lens claimed success based on correcting behaviours and primarily benefitted external stakeholders rather than ND individuals themselves (Dorji, 2021; Haydicky et al., 2013; Ogundele & Ayyash, 2023; Robin, 2014; Sibley et al., 2020; Sibley et al., 2021). Research conducted using a neuro-affirming lens consistently demonstrated positive outcomes for ND individuals that focused on enhancing their wellbeing and quality of life (Garey & Lord, 2024; Halmøy et al., 2022; Hsu et al., 2021; Ma et al., 2018; Pantazakos, 2023; Prochaska & Norcross, 2018). This distinction helps to answer my research question, and based on this analysis, it is evident that adopting a neuro-affirming lens can profoundly improve therapeutic practices and outcomes for ND populations.

Chapter Three: Discussion and Applied Practice

Discussion

The purpose of this capstone is to facilitate a paradigm shift surrounding understanding and accepting neurodiversity. Applying a neuro-affirming framework to current therapeutic modalities positively impacts mental health outcomes for ND individuals. Some modalities, such as CBT, DBT, and narrative therapy, are naturally more neuro-affirming as they utilize goals and techniques that celebrate and affirm individuals' identities (Pantazakos, 2023; Prochaska & Norcross, 2018). Other modalities, including SFT, MI, ABA, ACT, and family therapy, are less naturally neuro-affirming as goals and techniques typically used in these modalities tend to rely on neuro-normative interpretations of wellbeing and successful therapeutic outcomes (Chapman & Botha, 2022; Dougan, 2023; Hsu et al., 2021; Ma et al., 2018; Seery et al., 2023). Modalities such as CBT, DBT, and narrative therapy are, by default, more neuro-affirming and thus more effective than SFT, MI, ABA, ACT, and family therapy (Chapman & Botha, 2022; Dougan, 2023; Hsu et al., 2021; Ma et al., 2018; Pantazakos, 2023; Prochaska & Norcross, 2018; Seery et al., 2023). However, of all the modalities, only ABA treatment goals, techniques, and outcomes cannot easily be improved by utilizing a neuro-affirming lens, as doing so would fundamentally change the therapeutic modality (Chapman & Botha, 2022). Applying a neuro-affirming lens to SFT, MI, ACT, and family therapy vastly improves outcomes for ND individuals (Chapman & Botha, 2022; Dougan, 2023; Hsu et al., 2021; Ma et al., 2018; Seery et al., 2023).

ABA and ACT are both based in behaviourism. Applying a neuro-affirming lens would fundamentally change the nature and core goals of ABA. Thus, it is not possible to apply a neuro-affirming lens to this modality. ABA is not aimed at enabling independence but eliminating ND traits (Garey & Lord, 2024). Thus, research shows that ABA can help decrease

inappropriate classroom behaviours but fails to address ND differences and wellbeing (Dorji, 2021). On the other hand, ACT can be successfully adapted to celebrate and affirm neurodiversity by applying a neuro-affirming lens. Neuro-affirming ACT, which accepts and affirms neurodivergence, has been shown to increase understanding of neurodivergence, improve self-acceptance, and positively impact ND individuals' outlook of themselves and their relationship with their thoughts and behaviours (Seery et al., 2023).

CBT, DBT, and narrative therapy are already incredibly effective when working with ND individuals as these modalities are naturally neuro-affirming. Intentional utilization of neuro-affirming goals and technique adaptations further increase the benefits to ND individuals when using these modalities. CBT has been shown to be effective in improving executive functions, reducing avoidance and procrastination, improving self-esteem, and reducing anxiety and aggression in ADHD adults and children (Hassani et al., 2021; Pan et al., 2019; Young et al., 2016). DBT has been shown to decrease the severity of hyperactive and impulsive symptoms and have a significant positive effect on core symptoms of ADHD, including emotional dysregulation and functional impairment (Fullen, Jones, et al., 2020; Meyer et al., 2022). CBT techniques, such as cognitive restructuring, and DBT techniques, such as emotion regulation and distress tolerance, can help ND individuals better manage some of the negative aspects of neurodivergence without invalidating the positive aspects (Halmøy et al., 2022; Haydicky et al., 2013; Prochaska & Norcross, 2018). These techniques can aid in recognizing cognitive distortions such as all-or-nothing thinking, regulating emotions and behaviours, addressing relationship issues and overcoming communication differences, dealing with masking and self-esteem issues, helping achieve goals, maintaining accountability, and overcoming internalized stigma (Halmøy et al., 2022; Haydicky et al., 2013; Prochaska & Norcross, 2018).

Narrative therapy has been shown to reduce fear and anxiety, improve relationships with others, increase self-perception, and decrease behaviour problems in ND individuals (Bayat et al., 2018; Fatahi et al., 2021). Narrative therapy has been shown to be effective in treating trauma in ND populations (Boodoo et al., 2022; DiBacco & Gaynor, 2021; Jagatdeb et al., 2024; Morrison, 2020; Sloan & Marx, 2019; Sloan et al., 2023). Narrative therapy utilizing a neuro-affirming framework has been shown to be particularly effective in ADHD women, especially those who were diagnosed late and are dealing with unmasking (Morrison, 2020). Narrative therapy allows ND clients to reflect on feelings of helplessness, blame, shame, guilt, and negative self-worth (Jagatdeb et al., 2024). Neuro-affirming narrative therapy allows ND clients to deconstruct societal narratives that put them at fault, and re-author stories that align with their own values, skills, and strengths (Jagatdeb et al., 2024).

SFT, MI, and family therapy can be highly effective for ND individuals when neuro-affirming goals and techniques are utilized. When a neuro-affirming lens is applied, SFT and MI techniques that focus on acceptance, understanding, and interest-based motivation have been shown to significantly improve self-efficacy and self-esteem (Barkley, 2018; Dougan, 2023; Hsu et al., 2021; Karakaya & Özgür, 2019; Meinzer et al., 2021; Sibley et al., 2020; Sibley et al., 2021). Family therapy that focuses on understanding and acceptance is more effective than family therapy that focuses on “fixing problem behaviours” (Ma et al., 2018; Robin, 2014). In summary, working with the brain, by utilizing strengths and interests, rather than against it, by setting neuro-normative goals and measuring against neuro-normative standards, will lead to improved mental health outcomes in ND individuals.

The application of the neuro-affirming framework to therapeutic practice can shift how mental health practitioners view ND individuals and can help them better understand their

clients' needs and adapt their treatment plans. Despite the statistically significant “positive” outcomes found in many neuro-normative studies, research that utilizes neuro-normative and pathologizing treatments and outcome measures are based on neuro-normative structural power systems (Chapman & Botha, 2022; Dorji, 2021; Haydicky et al., 2013; Manassis, 2005; Robin, 2014; Sibley et al., 2020; Sibley et al., 2021). This basis helps maintain societal inequities which reinforce the view that disability is something to cure rather than celebrate (Chapman, 2020; Chapman & Botha, 2022; Chapman & Bovell, 2020). The neuro-normative framework is likely to negatively impact ND individuals more than it is likely to benefit them (Chapman, 2020; Chapman & Botha, 2022; Chapman & Bovell, 2020). Mental health practitioners have an ethical responsibility to maximize benefit and minimize harm (Canadian Psychological Association [CPA], 2017; College of Alberta Psychologists [CAP], 2022). As such, utilizing the neuro-affirming framework is an excellent way to meet that ethical imperative. Focusing on reducing symptoms, while admittedly helpful in some circumstances, fails to address the stigma, shame, and discrimination that prevent overall wellbeing for ND individuals.

The benefits of applying a neuro-affirming framework to therapeutic modalities include reduction of harm caused by neuro-normative approaches, improved mental health outcomes, such as reduced distress and greater overall wellbeing, and improved therapeutic alliances and ethical practice that respects ND identities and addresses societal inequities (Chapman & Botha, 2022; Chapman & Bovell, 2020). Celebrating strengths and working with differences can drastically improve ND individuals' mental health outcomes (Chapman & Botha, 2022; Chapman & Bovell, 2020). Application of a neuro-affirming framework in therapeutic practice offers ND individuals support, celebration, affirmation, understanding, and acceptance.

Limitations

The literature review revealed several limitations in the current research. There is still a significant gap in research focusing on ND gender and racial minorities. Research predominantly focuses on neuro-normative research goals and outcome measures, although this has improved greatly in recent years. There is not only a lack of understanding and acceptance of neurodiversity but also a lack of interest in shifting perspectives to a more neuro-affirming one. There is also a lack of ND inclusion in research teams. Research is being done on ND individuals by NT individuals, which results in a biased perspective.

I would like to see future research shift focus from neuro-normative goals such as symptom reduction, improved focus, and behavioural changes to neuro-affirming goals such as distress reduction, cognitive flexibility, adaptive strategies, acceptance, reduction of internalized shame, and emotion regulation. My hope is that all future research involving ND individuals would use a neuro-affirming framework. I would also like to see more educational and training programs that utilize a neuro-affirming lens. Studies regarding how to effect policy change on a systemic level, including rephrasing language in diagnostic criteria and assessments using a neuro-affirming lens would also be beneficial.

Further research into the effectiveness of applying the neuro-affirming lens to other modalities may further benefit ND clients. For example, very limited research was available on the effectiveness of utilizing Internal Family Systems (IFS) and parts work with ND individuals. Due to the link between ADHD and trauma (Boodoo et al., 2022; McDonald & Ejesi, 2020; Miodus et al., 2021), further research into IFS and parts work may be warranted due to the modality's effectiveness in treating trauma (Hodgdon et al., 2021). IFS can help people understand, manage, and release the intense feelings and behaviours that various "parts" take on,

which can improve coping skills and emotional regulation (Hodgdon et al., 2021). Modalities that can help improve emotion regulation skills can be very effective for ND individuals (Hajal & Paley, 2020; Perry et al., 2020; Schneider et al., 2016; Silvers, 2022; Spinelli et al., 2020; Weiss et al., 2018). As such, further research into IFS and other modalities designed to improve emotion regulation skills could benefit ND individuals, especially if a neuro-affirming lens could effectively be applied to the modalities (Chapman & Botha, 2022). Additionally, further research into applying a neuro-affirming lens to ACT would benefit ND individuals as it could serve as an effective behavioural therapy replacement for ABA (Fullen, Galab, et al., 2020; Garcia et al., 2021; Munawar et al., 2021; Seery et al., 2023). Further research into the effectiveness of interest- and strength-based approaches like play, art, music, and game therapies in combination with current therapeutic modalities could improve reliability and validity of those techniques which would also benefit ND individuals.

Conclusion

In conclusion, applying a neuro-affirming framework to therapeutic modalities benefits ND individuals. Not only will treatment be more ethical, but it will also be more effective. Modalities that focus on acceptance rather than behaviour change have been shown to be the most beneficial to ND individuals (Chapman & Botha, 2022). To ensure ethical practice, therapists must ensure they are culturally competent before working with ND individuals and that they utilize a neuro-affirming lens in their practice (Chapman & Botha, 2022). Shifting the paradigm of understanding and accepting neurodiversity will benefit ND individuals and transform therapeutic practice, improving both the therapeutic alliance and mental health outcomes.

Applied Practice

The neuro-affirming framework would be of great use to mental health practitioners working with ND individuals. Examples that contrast use and disuse of the neuro-affirming lens across different modalities are outlined in the case conceptualization section. A list of useful resources for self-directed learning about the neuro-affirming lens can be found in Appendix B.

Neuro-Affirming Lens in Therapeutic Practice

In therapeutic practice, the application of the neuro-affirming lens can be particularly beneficial. One study asserts that employing neuro-affirming practices that encourage ND ways of being, listening to ND experiences, and centering collaboration, is a moral and ethical imperative (Dallman et al., 2022). Historically, mental health processes have devalued ND identity by focusing on making ND individuals “look” NT (Grant, 2024). This neuro-normative focus results in struggles with self-worth, depression, anxiety, and can even result in trauma for ND clients (Grant, 2024). To generate maximum benefit for ND clients, the neuro-affirming lens should be applied to all aspects of practice including planning and goal writing, case note creation, and assessment of therapy needs (Grant, 2024). By viewing neurodivergence as a difference rather than a deficit, mental health professionals can shift the focus away from pathologization towards ND wellbeing (Bertilsdotter Rosqvist et al., 2020).

The neuro-affirming framework challenges traditional approaches to understanding neurodivergence by rejecting pathologization and stigmatization and instead celebrates diversity, promotes understanding and acceptance, and encourages genuine wellbeing (Bertilsdotter Rosqvist et al., 2020). Through a neuro-affirming framework, the focus of therapy can shift from “fix” or “cure” to validation, understanding, and empowerment (Chapman, 2020). Honouring lived experiences and unique strengths of ND individuals rather than focusing solely on symptom reduction or societal conformity is a core component of a neuro-affirming lens

(Chapman, 2020). The benefit of a neuro-affirming lens in therapeutic practice is in encouraging acceptance and validation, supporting authenticity, improving therapeutic outcomes, challenging harmful societal norms, facilitating tailored interventions, and promoting allyship and advocacy (Bertilsdotter Rosqvist et al., 2020). In therapeutic practice, adopting this neuro-affirming, acceptance-focused lens can help ND clients overcome internalized stigma, reclaim mental energy, focus on neuro-affirming goals, and improve their quality of life (Dallman et al., 2022). By integrating this neuro-affirming lens, mental health professionals can advance both therapeutic practice and broader societal understanding, ultimately improving the quality of life for ND individuals.

Case Conceptualization Comparisons

In this section I compare and contrast conceptualizations, goals, and interventions using a neuro-normative and a neuro-affirming lens across five different modalities. These examples demonstrate the impact utilizing the neuro-affirming lens can have on ND client care and outcomes. I also provide examples of mental health professionals in each scenario to facilitate self-identification in these supportive roles, though this does not limit who could benefit from this information. While I only covered five modalities, the neuro-affirming framework could be applied to other modalities in a similar fashion. Some modalities already demonstrate cultural competence and are effective for ND clients with minimal changes. Other modalities are diametrically opposed to the neuro-affirming framework and require drastic adjustments to demonstrate cultural competence and ensure ND client wellbeing. It is interesting to see the impact of applying the neuro-affirming lens to the different modalities. Through these examples, I hope to have demonstrated the ease with which the neuro-affirming framework could be applied to existing modalities and techniques. Hopefully, these examples, which elucidate what

minimal effort it takes to achieve such incredible benefits, will inspire mental health practitioners to adopt the neuro-affirming framework into their practice.

ABA Example

A school counsellor is assisting an ADHD child exhibiting behaviour that is impeding learning in the classroom. Please note that applying a neuro-affirming lens to this modality may fundamentally change the therapeutic goals beyond the original scope of ABA (Chapman & Bovell, 2020).

Conceptualizations. ABA focuses on identifying “problematic” behaviours and replacing them with neuro-normative ones, at the expense of ND wellbeing (Chapman & Botha, 2022). ABA often assumes behaviours are problematic because they do not fit the social norms, and it often addresses behaviours which ND individuals themselves find nonproblematic (Chapman & Botha, 2022).

- ***Neuro-Normative Conceptualization:*** A “child with ADHD” is frequently disrupting the classroom by fidgeting and leaving their seat.
- ***Neuro-Affirming Conceptualization:*** The child’s classroom disruptions stem from unmet sensory and executive functioning needs.

While the neuro-normative conceptualization only frames the issue from an external perspective, the neuro-affirming conceptualization examines how the environment and lack of accommodations contribute to the behaviour, rather than pathologizing the child. Take note of the intentional use of person-first language (i.e., child with ADHD) in the neuro-normative conceptualization.

Goals. ABA therapy has been criticized for rewarding Autistic children for engaging in activities that make them more “normal” (Chapman & Botha, 2022). Thus, a neuro-affirming goal would differ greatly from typical goals in ABA.

- ***Neuro-Normative Goal:*** Eliminate disruptive behaviours and increase time spent seated.
- ***Neuro-Affirming Goal:*** Address sensory and movement needs to foster engagement, reduce frustration, and maintain a functional classroom environment.

The neuro-normative goal is designed to reduce behaviours that do not conform to societal or institutional norms rather than meet the needs of the child. The neuro-affirming goal shifts the focus to creating a supportive environment rather than “fixing” the child.

Interventions. ABA interventions have also been criticized for harming ND individuals by promoting masking and self-stigmatization (Chapman & Botha, 2022).

- ***Neuro-Normative Intervention:*** Use token rewards for sitting quietly and punish fidgeting by removing the item.
- ***Neuro-Affirming Intervention:*** Implement Differential Reinforcement of Alternative Behaviours (DRA) by creating opportunities for movement (i.e., movement breaks, quiet fidget toys, a wobble chair) and using visuals to support transitions and focus.

In the neuro-normative intervention, positive reinforcement and negative punishment are used to shape behaviour by providing a tangible reward for desired actions and consequences for undesired actions. This approach is problematic for several reasons. Fidgeting or stimming is a way of getting rid of excess energy and self-soothing which allows ADHDers to regulate their nervous systems and focus more effectively (Rotz & Wright, 2024). Removing that outlet will be a detriment to the child’s learning (Rotz & Wright, 2024). Additionally, ADHDers have interest-based nervous systems, where motivation is found through personal engagement and curiosity,

rather than importance-based nervous systems, where motivation is linked to rewards and consequences (Dodson, 2023). Thus, a token reward system may lose effectiveness after the novelty wears off (Dodson, 2023). Factors such as rejection sensitivity (dysphoria; RSD), persistent drive for autonomy (pathological demand avoidance [PDA]), and even oppositional defiance (disorder; ODD) may impact the child's reaction to being told what to do without an explanation or collaboration (Moore, 2020). Overall, this technique focuses on conformity over actual support. The neuro-affirming intervention helps create sustainable behavioural changes by ensuring interventions are focused on learning and wellbeing over compliance and conformity.

SFT Example

A private practice therapist is assisting an ADHD adult who feels overwhelmed by their daily tasks.

Conceptualizations. SFT focuses on strength-based solution-building (Gladding & Alderson, 2016). Through use of techniques like validating strengths, presupposing change, and miracle, exception, scaling, and coping questions, SFT can effectively externalize the problem and help generate solutions (Gladding & Alderson, 2016).

- ***Neuro-Normative Conceptualization:*** An inability to manage daily tasks is impacting the client's productivity and overall functioning.
- ***Neuro-Affirming Conceptualization:*** Struggles with task prioritization and time management are impacting the client's ability to manage daily tasks.

These conceptualizations are very similar. However, the neuro-affirming conceptualization offers a more comprehensive synthesis of the main issue through externalization of the problem and acknowledgment of disability.

Goals. In SFT, SMART (specific, measurable, achievable, relevant, and time-bound) goals are often employed to help clients reach solutions quickly and effectively (Gladding & Alderson, 2016).

- ***Neuro-Normative Goal:*** Implement organizational strategies aimed at increasing productivity.
- ***Neuro-Affirming Goal:*** Co-create organizational systems that embrace neurodivergence and reduce feelings of overwhelm.

The neuro-normative goal relies on external definitions of success, organization, and productivity. The neuro-affirming goal honours the client’s neurodivergence and can help build sustainable habits.

Interventions. SFT interventions can effectively externalize problematic behaviours (Hsu et al., 2021) and when a neuro-affirming lens is applied, can significantly improve self-efficacy and self-esteem in ND individuals (Karakaya & Özgür, 2019).

- ***Neuro-Normative Intervention:*** Utilize the miracle question to help client imagine an organized life and break goals into actionable steps.
- ***Neuro-Affirming Intervention:*** Explore exceptions to the problem by identifying times when the client successfully managed tasks, and brainstorm how to replicate those successes. Create an accountability plan to ensure follow-through.

The neuro-normative intervention, while helpful, might not consider systemic barriers or ND needs. The neuro-affirming intervention builds on client strengths, can help with accountability, and shifts the focus from “fixing” ADHD traits to working with them.

CBT Example

An Employee Assistance Program (EAP) therapist is assisting a young ADHD adult who is having trouble meeting deadlines at work.

Conceptualizations. CBT focuses on the interplay between thoughts, feelings, and behaviours (Gladding & Alderson, 2016). CBT is structured, adaptable, and has been shown to be effective in treating depression, anxiety, and phobias, in addition to many other mental health issues (Gladding & Alderson, 2016). When a neuro-affirming lens is applied, CBT can be readily adapted to be highly effective with ND individuals (Pantazakos, 2023).

- ***Neuro-Normative Conceptualization:*** The client has difficulty meeting deadlines due to chronic procrastination and inattention, which often results in harsh self-criticism and a continuation of the problematic behaviours.
- ***Neuro-Affirming Conceptualization:*** The client struggles with chronic procrastination and self-criticism due to executive functioning challenges, unrealistic workplace expectations, and internalized stigma.

While the neuro-normative conceptualization identifies the maladaptive thought patterns contributing to emotional distress and unproductive behaviours, it fails to acknowledge potential external factors impacting the client's distress. It also pathologizes inattention. In the neuro-affirming conceptualization there is an acknowledgment of the ADHD-related challenges and external factors negatively impacting thoughts, emotions, and behaviours. This acknowledgement is likely to lead to more effective strategies which can help promote self-compassion and acceptance and reduce distress.

Goals. Goals in CBT center around reducing cognitive distress through cognitive restructuring, behavioural experiments, and mindfulness techniques (Gladding & Alderson,

2016). To maximize benefit, it is imperative that these goals be created using a neuro-affirming lens (Pantazakos, 2023).

- **Neuro-Normative Goal:** Help the client identify and challenge negative automatic thoughts and replace them with more balanced, realistic perspectives.
- **Neuro-Affirming Goal:** Empower the client to develop ADHD-friendly systems and reframe self-critical thoughts to foster acceptance and resilience.

The neuro-normative goal aims to reduce cognitive distortions that perpetuate feelings of inadequacy and procrastination. CBT is one of the modalities that can be easily retrofitted to be neuro-affirming (Pantazakos, 2023; Prochaska & Norcross, 2018). If “balanced” and “realistic” include acceptance of the fact that positive thinking won't eliminate ADHD-related time management challenges, but promoting acceptance and understanding can help reduce distress, then this is a useful goal, the effectiveness of which will depend on the application of the intervention. Goal clarity is important when working with ND individuals as it ensures that words like balanced and realistic are defined in a neuro-affirming way. The neuro-affirming goal clearly emphasizes adapting the environment and reframing internalized stigma rather than solely changing the client's thought patterns. Both goals focus on removing distress over directly targeting the behaviour.

Interventions. CBT has been shown to be effective in improving executive functioning, reducing avoidance and procrastination, improving self-esteem, and reducing anxiety and aggression in ADHD adults and children (Hassani et al., 2021; Pan et al., 2019; Young et al., 2016). This shows the overall efficacy of CBT as some of these studies used neuro-normative approaches that focused on symptom reduction, while others used neuro-affirming approaches that focused on wellbeing (Hassani et al., 2021; Pan et al., 2019; Young et al., 2016). Utilizing a

neuro-affirming lens when conducting research could shed light on many potential benefits including symptom reduction.

- ***Neuro-Normative Intervention:*** Cognitive restructuring and behavioural experiments such as activity scheduling or task chunking, could be utilized to reduce cognitive distress and procrastination.
- ***Neuro-Affirming Intervention:*** Cognitive restructuring, mindful behavioural activation, and environmental adaptation could be utilized to reduce cognitive distress and create accommodations that reduce the cognitive load required for task activation and facilitate resilience.

One reason CBT has been shown to be effective with or without the neuro-affirming lens is that the cognitive restructuring technique is universally beneficial. An example of cognitive restructuring that would allow the client to replace negative thoughts would be replacing: “I’ll never succeed” or “I’m just lazy” with thoughts such as “I’ve succeeded before when I had support” or “my brain works differently, and that’s okay.” Without a neuro-affirming lens, interventions may inadvertently reinforce the idea that procrastination and self-criticism are personal failings rather than manifestations of ADHD-related executive functioning challenges. Behavioural experiments, such as activity scheduling and task chunking would allow the client to test beliefs such as “I can’t get anything done.” However, if ADHD-related traits prevented these experiments from succeeding, this might reinforce negative beliefs. A neuro-affirming approach normalizes ADHD-related challenges and shifts the focus from “fixing” the individual to empowering them to thrive within their unique ND framework. Interventions that utilize a neuro-affirming lens, such as behavioural activation and environmental adaptation, create fewer opportunities for failure, and thus are more effective with ND clients. Behavioural activation

encourages behaviours by celebrating accomplishments, thus creating a positive feedback loop and environmental adaptation can help to create accommodations that facilitate maintenance of constructive behaviours.

Narrative Example

An academic advisor/career counsellor is assisting an ADHD high school student who is distressed about their poor academic performance.

Conceptualizations. Narrative therapy focuses on deconstructing old, harmful narratives and reauthoring new, beneficial ones (Prochaska & Norcross, 2018). Through externalization and reauthoring, narrative therapy can help alleviate blame and guilt (Prochaska & Norcross, 2018). Narrative therapy exhibits inherent cultural competence by helping individuals deconstruct and externalize discrimination, even previously internalized stigma (Prochaska & Norcross, 2018).

- ***Neuro-Normative Conceptualization:*** The client frequently expresses feelings of failure due to poor academic performance.
- ***Neuro-Affirming Conceptualization:*** The client is experiencing internalized narratives of inadequacy due to rigid, neuro-normative school systems that fail to accommodate their ND differences.

Narrative therapy allows for numerous retellings of personal stories. The dominant theme in the neuro-normative story is personal failure which impacts the client's self-esteem and sense of agency. The dominant theme in the neuro-affirming story is how societal structures and expectations contribute to the client's disempowering narratives.

Goals. Goals in narrative therapy revolve around helping individuals reinterpret their life stories, thereby shifting their perception, identity, and experiences to promote healing, growth, and empowerment (Prochaska & Norcross, 2018).

- ***Neuro-Normative Goal:*** Help the client challenge the “failure” narrative and develop a more empowering story of resilience and potential.
- ***Neuro-Affirming Goal:*** Help the client reframe the narrative to celebrate ND strengths and explore how these can be leveraged in the academic environment.

Both goals would help empower ND individuals by helping to highlight strengths and possibilities. The neuro-affirming goal demonstrates cultural competence by highlighting understanding, acceptance, and celebration of neurodivergence as key components of the client’s identity and story.

Interventions. By utilizing the four primary techniques of narrative therapy, constructing the narrative, externalizing the problem, deconstruction, and re-authoring, narrative therapy can help the client improve their self-esteem, self-compassion, self-efficacy, and self-actualization (Prochaska & Norcross, 2018). While the techniques would remain the same, application of the techniques could vary with use of the neuro-affirming lens.

- ***Neuro-Normative Intervention:*** The client could feel more empowered through interventions like externalization of the problem, (i.e., failure is a story you have been told, not who you are) and re-authoring the story (i.e., your past successes can happen again).
- ***Neuro-Affirming Intervention:*** The client could feel validated, understood, accepted, and empowered through interventions like externalization of the problem, (i.e., you are not being accommodated appropriately to allow you to succeed) and re-authoring the story (i.e., being “different” does not mean you are “broken,” you have many strengths that will help you thrive).

Both interventions help the client see the problem as separate from their identity, creating space for change. However, re-authored narratives that do not utilize the neuro-affirming lens risk perpetuating NT norms by focusing solely on overcoming perceived deficits without examining systemic barriers or validating neurodivergence. Shifting the narrative to include strengths and systemic factors can help the client feel validated and empowered, leading to both internal and external growth.

Family Example

A systemic or relational family therapist is assisting a neurodiverse family who are experiencing conflict.

Conceptualizations. In family therapy, often problems are conceptualized as arising from maladaptive family dynamics (Gladding & Alderson, 2016). Family therapy techniques often focus on communication and boundary-setting (Gladding & Alderson, 2016). A neuro-affirming lens reinforces that maladaptive family dynamics stem from mismatched communication and behavioural expectations rather than personal failings (Hillary, 2020).

- ***Neuro-Normative Conceptualization:*** Familial conflict is likely due to tension and arguing over the ADHD teen's behaviours and attitudes.
- ***Neuro-Affirming Conceptualization:*** Familial conflict is likely due to a lack of understanding of their teen's ADHD traits and failure to adapt neuro-normative expectations.

Both conceptualizations have identified maladaptive communication as the main source of familial conflict. However, the neuro-normative conceptualization fails to address the root cause of the miscommunication in the same way that the neuro-affirming conceptualization, which promotes acceptance and understanding, does.

Goals. Goals that focus on correcting “problem” behaviours are ineffective (Manassis, 2005). Goals that focus on education, understanding, awareness, communication, and acceptance, successfully reduce family conflict (Robin, 2014).

- ***Neuro-Normative Goal:*** Improve communication and reduce conflict by outlining clear expectations.
- ***Neuro-Affirming Goal:*** Improve understanding, acceptance, and communication to reduce conflict and create an accommodating and functional family dynamic.

Both goals are consistent with family therapy’s emphasis on improving relational patterns and fostering mutual understanding. The neuro-affirming goal goes the additional step of helping to create a supportive environment that honours both ND and NT needs.

Interventions. Typical family therapy interventions can be very beneficial but may fail to accommodate ND differences. Neuro-affirming family therapy interventions should focus on reducing shame and conflict, promoting acceptance, and building a more accommodating and supportive family dynamic (Chapman & Botha, 2022).

- ***Neuro-Normative Intervention:*** Teach "I" statements (i.e., "I feel frustrated when the trash is not taken out because...") to encourage non-blaming communication.
- ***Neuro-Affirming Intervention:*** Develop a "family accountability plan," where members discuss and agree on specific strategies to meet everyone’s needs (i.e., using visual reminders for chores).

Reducing defensiveness and facilitating problem-solving conversations can greatly improve family dynamics. However, ADHD teens, who struggle with tasks requiring executive function, can greatly benefit from explanation, structure, and accountability (Leahy et al., 2021), in addition to improved communication and conflict reduction strategies (Jaksa, 2023). Creating

a supportive family dynamic requires understanding of neurodiversity in addition to communication skills.

Conclusions

Comparing and contrasting neuro-normative and neuro-affirming conceptualizations, goals, and interventions clearly outlines the positive difference applying the neuro-affirming lens can have on ND client outcomes. Acceptance and understanding could help adapt even the most harmful modalities (ABA) and create even more positive benefit from the modalities that already provide some benefit. This type of cultural competence is essential for mental health professionals working with ND clients (CPA, 2017; CAP, 2022). These examples clearly show the benefit of shifting the paradigm of understanding surrounding neurodiversity and applying the neuro-affirming lens.

Suggested Neuro-Affirming Accommodations

In this section, suggestions for improvements in counsellor education and practical neuro-affirming changes are discussed. See Appendix B for further resources about the neuro-affirming lens.

Suggested Improvements for Counsellor Training

To help mental health practitioners avoid the three main counselling traps identified by Bowers and Widdowson (2023, p. 43), “lack of understanding (and pathologizing) of coping behaviours or defence mechanisms, over-reliance on change or outcome focused care, resulting in the invitation to over-adapt and mask, [and] making assumptions about the needs, abilities, interests, etc. of neurodivergent people based on behaviour,” counsellor education needs to improve. Dougan (2023) and Hanley et al. (2023) made several recommendations for neuro-affirming counsellor training improvements which can be summarized using the 4 C’s:

- Continuing Professional Development: Continue to attend professional development on neurodiversity and on counselling ND clients to increase awareness and understanding and decrease stigma. However, be wary of training that misrepresents ND people or does not include ND perspectives.
- Communication: Take communication training courses to improve collaborative communication strategies and to remove the sole burden of competent communication from the shoulders of ND people.
- Cultural Competence: Take cultural training courses to understand the neuro-cultural differences and the impact the environment has on disabling ND people. Be open to ND worldviews and be able to suspend NT viewpoints.
- Choice: When choosing counselling theories to work with, think about who the theory was designed to help. Ensure theory choice benefits the ND client instead of focusing on promoting the neuro-normalization of behaviours.

Not only does counsellor education need to improve, but so too does access to education. Clinical training should be made more accessible to ND people, who may be better placed to empathize with and provide care for ND clients (Chapman & Botha, 2022). ND counsellors in training have faced microaggressions including being told “they would not be good counsellors because of their idiosyncrasies” (Hanley et al., 2023). To maximize benefit and minimize harm for ND clients and counsellors, the discriminatory practices and outdated teachings in counselling training need to be addressed. Application of a neuro-affirming lens to counsellor education programs would help remove barriers to training and improve the training itself.

Practical Neuro-Affirming Changes

In addition to suggestions for neuro-affirming educational improvements, Dougan (2023) outlined several counselling practice considerations that would improve the ND-friendliness of therapeutic practice:

- use unambiguous language
- remove expectations regarding eye contact
- adapt the environment for sensitivities (e.g., light, sound, texture)
- have sensory or stim items available
- minimize distractions
- maintain consistency

These suggestions provide a framework for adapting therapeutic practices to be more inclusive and supportive of ND clients. Neuro-affirming accommodations to the therapeutic structure such as providing more follow-up, giving appointment time leniency, gamification of therapeutic homework, use of active mindfulness techniques, and utilizing special interests could also provide a sense of acceptance and empowerment to ND clients (Bowers & Widdowson, 2023). By implementing these practices, therapists can create environments that emphasize acceptance, understanding, and individualized support and are more accommodating and respectful of the diverse sensory, emotional, cognitive, and communication needs of ND individuals. Universal design of physical spaces promotes inclusion, improves flexibility and usability, and reduces the need for individual adaptation (Dougan, 2023). Neuro-affirming adaptations can enhance the effectiveness of therapy and empower ND clients.

Therapeutic Techniques

In this section, I review various therapeutic techniques that can be applied with and without a neuro-affirming lens. Reviewing these techniques can demonstrate the effectiveness of the use of the neuro-affirming lens, demonstrate how to apply the lens effectively, and help answer the question about whether shifting the paradigm of understanding surrounding neurodiversity improves ND individuals' wellbeing.

Psychoeducation

Psychoeducation is utilized as a technique to share information with clients that can help them learn and grow. Neuro-affirming psychoeducation can help combat ignorance and discrimination to foster understanding and acceptance. Neuro-affirming psychoeducation has been shown to decrease stigma and discrimination, including internalized stigma and discrimination, faced by ND individuals (Jones et al., 2021). Utilizing psychoeducation as a neuro-affirming therapeutic technique is particularly important due to increased stigmatization being associated with the belief that ADHD is a medical disability rather than a social one (Maftai et al., 2024). The negative impact of stigma, both public and internalized, is present in both children and adults and can lead to worsening ADHD and ASD symptoms (Godfrey et al., 2020). Research has found that the negative beliefs, prejudicial attitudes, and stereotypes about ADHD (careless, stupid, faking the disorder, not trying hard enough, lazy, crazy, childish, socially inappropriate, violent, antisocial, dangerous, and reckless) can discourage ND individuals from seeking support (Barton, 2021; Meza et al., 2019; Nguyen & Hinshaw, 2020). Public stigma and self-stigma impede ND individuals from seeking mental health treatment and can impede the development of effective therapeutic alliances (Sanderson, 2021). In ND children, these negative perceptions have been shown to negatively impact social skills and self-confidence, can yield negative emotional and behavioural reactions such as fear, anger, and

emotional outbursts, and often result in social isolation, exclusion, and bullying (Meza et al., 2019; Nguyen & Hinshaw, 2020). Discrimination, stigma, and ableist microaggressions can interfere with diagnosis of ADHD and ASD, hinder treatment, and can also result in trauma symptoms (Gahris, 2023; Mueller et al., 2012; Nguyen & Hinshaw, 2020). Diagnosis, an ADHD or ASD label, may serve as a protective factor for ND individuals to help overcome internal and external biases (Meza et al., 2019). Understanding, validation, and community support can be powerful healing tools, hence why neuro-affirming psychoeducation is essential (Matthies et al., 2016). Neuro-affirming psychoeducation and parent training are essential for overcoming these negative perceptions and reducing stigma and maltreatment (Sanderson, 2021). ND acceptance training programs can improve inclusive attitudes, social interest, and social desirability thus demonstrating neuro-affirming psychoeducation can improve therapeutic outcomes and wellbeing of ND individuals (Jones et al., 2021).

Discrimination and microaggressions can even be present in the therapeutic space (Gahris, 2023; Maftai et al., 2024). Research has shown that biased or inadequately trained mental health professionals are more likely to perceive Black neurodivergent children as hostile or aggressive resulting in them receiving harsher or inaccurate diagnoses, which negatively impacts social and health outcomes (Akubuiro et al., 2023). Having intersectional awareness, employing curiosity and transparency, and ensuring autonomy and respect can enhance the therapeutic alliance, patient rapport, treatment experience, and treatment planning (Rojas et al., 2019; Sanderson, 2021). Neuro-affirming psychoeducation for mental health professionals that includes information about diagnosis, treatment, and medication has been shown to reduce deeply held attitudes, biases, and prejudices, and improving mental health outcomes for ND individuals (Sanderson, 2021).

Psychoeducation about communication differences can also improve therapeutic outcomes and quality of life for ND individuals (Crompton et al., 2021). Understanding the findings of studies exploring the Double Empathy Problem (Milton et al., 2022) and cross-neurotype communication using The Telephone Game (Crompton & Fletcher-Watson, 2019) and sharing this understanding with ND clients and NT colleagues can help reduce miscommunication between NDs and NTs and improve ND individuals' wellbeing (Crompton et al., 2021). When ND individuals are able to openly communicate their problems and symptoms, and be met with understanding and acceptance, the risk of social rejection can be reduced and health outcomes improved (Matthies et al., 2016).

Contrastingly, psychoeducation that uses a neuro-normative approach increases stigma and discrimination faced by ND individuals due to reinforcing the aforementioned negative perspectives that lead to social isolation, decreased access to support and treatment, and worse mental health outcomes (Chapman & Bovell, 2022). Studies have shown that therapeutic practice that over-relies on the medical model of disability, which pathologizes neurodivergence, and prioritizes neuro-normalization impedes therapeutic progress and outcomes and can invalidate ND individuals' identity and cause emotional harm (Chapman & Bovell, 2022; Pantazakos, 2023). Studies have also shown that neuro-normative psychoeducation that pathologizes behaviours can encourage over-adaptation and masking which can lead to burnout, anxiety, or self-esteem issues (Hanley et al., 2023). Additionally, perpetuating debunked information, such as "vaccines cause autism," is detrimental to herd immunity and perceptions (including self-perceptions) of ND individuals (Smith et al., 2011). It should be clear that suggesting that cognitive differences are less desirable than contracting diseases would have a negative impact on ND individuals' self-esteem and wellbeing.

Research into psychoeducation as a therapeutic technique has shown clear evidence in support of utilizing the neuro-affirming lens to improve mental health outcomes for ND individuals (Jones et al., 2021; Maftai et al., 2024; Matthies et al., 2016; Sanderson, 2021). To limit the spread of discriminatory information, mental health professionals must critically evaluate if the psychoeducation they provide to ND clients is biased or valid, disinformation or factual, and neuro-affirming or neuro-normative (Nguyen & Hinshaw, 2020). Some helpful neuro-affirming psychoeducational resources for neurodiversity can be found in Appendix B.

Mindfulness & Somatic Techniques

Mindfulness and somatic techniques are utilized to help clients to promote bodily awareness and emotion regulation (Gladding & Alderson, 2016). Mindfulness, which encourages nonjudgemental awareness of the present moment, and somatic techniques, which focus on the connection between mind and body, can be very helpful therapeutic techniques, especially for ND individuals (Cairncross & Miller, 2016; Xue et al., 2019). Research has shown that mindfulness and somatic techniques can help ND individuals navigate executive dysfunction, which indicates these techniques have a “putative role in ‘brain-training’” (Halmøy et al., 2022, p. 8). Utilizing a neuro-affirming lens to adapt goals and techniques when using mindfulness based cognitive therapy (MBCT) with ND individuals is critical for the effectiveness of mindfulness and somatic techniques (Haydicky et al., 2013). Research has shown that mindfulness and somatic techniques have little impact on “improving” ADHD behaviours, but using these techniques did result in significant reductions in depression and anxiety in ND individuals (Haydicky et al., 2013). Neuro-normative application of these techniques can fail to adequately support ND differences like hyperactivity, impulsivity, and alexithymia (Haydicky et al., 2013). Passive mindfulness may not be suited to ND brains due to the speed and quantity of

their thoughts, thus attempts have been made to modify mindfulness practices to be more neuro-affirming by making them more active (Haydicky et al., 2013). Some adaptations to make mindfulness activities more active include bubble meditation, fixation exercise (stationary point vs. moving object), attention to detail game, meditation with sounds, active yoga, and half-way reflection (Haydicky et al., 2013). Neuro-affirming adaptations to therapeutic techniques significantly improve mental health outcomes for ND individuals using these mindfulness and somatic techniques (Halmøy et al., 2022; Haydicky et al., 2013).

Interest- & Strength-Based Approaches

Interest- and strength-based approaches leverage clients' existing interests and strengths to facilitate skill-building and improve wellbeing. Therapeutic modalities can rely on strength-based techniques to help clients build skills, self-reliance, and resilience, as techniques that capture attention and curiosity are likely to increase engagement in, participation in, adherence to, and maintenance of the therapeutic plan (Gladding & Alderson, 2016). Because ND individuals have interest-based nervous systems, where motivation is found through personal engagement and curiosity, rather than importance-based nervous systems, where motivation is linked to rewards and consequences (Dodson, 2023), interest- and strength-based approaches are particularly effective within ND populations. Mental health practitioners can easily apply the neuro-affirming lens to their practice by utilizing therapeutic techniques that leverage pre-existing strengths and interests such as music, art, and games.

Music & Art Therapy. Music and art therapy employ creative, expressive, nonverbal processes to promote emotional, cognitive, and sensory integration and healing (Gladding & Alderson, 2016). These techniques can be particularly beneficial for ND individuals as they provide an alternative method for communication, self-expression, and emotional processing.

Music Therapy. Music therapy can help regulate emotions, encourage social interaction, enhance communication, and improve motor skills (Martin-Moratinos et al., 2023; Park et al., 2023; Saville et al., 2025). Upon reviewing two separate meta-analyses that reviewed over 20 studies, it became clear that music is an effective therapeutic technique for use with ND individuals. Studies have shown that listening to and making music can increase serotonin, decrease cortisol, and reduce heart rate and blood pressure, and can help support emotional regulation, relaxation, and build resilience to stress (Martin-Moratinos et al., 2023; Saville et al., 2025). Studies have also shown that playing instruments can reduce impulsivity, disruptive behaviours, and aggression, and can enhance motor coordination, working memory, and social skills (Martin-Moratinos et al., 2023; Saville et al., 2025). Studies have also shown that listening to music while studying can help improve focus and comprehension (Martin-Moratinos et al., 2023; Saville et al., 2025).

Despite these two meta-analyses reviewing the same studies and coming to the same conclusions about the effectiveness of music as a therapeutic technique for ND individuals, the language of these two meta-analyses and the differences in the interpretation of the conclusions clearly demonstrates the importance of utilizing the neuro-affirming lens when working with ND individuals (Martin-Moratinos et al., 2023; Saville et al., 2025). The conclusions found in the meta-analysis utilizing a neuro-normative lens often included mention of overcoming deficits or reduction of ADHD symptoms and focused on addressing classroom disturbances over individual wellbeing (Saville et al., 2025). Instead, the conclusions found in the meta-analysis utilizing a neuro-affirming lens focused on directly improving ND wellbeing over improving the perceptions of others and mentioned specific benefits, like reducing impulsivity, rather than pathologizing traits (Martin-Moratinos et al., 2023). The following contrasting conclusions from

the two meta-analyses about the same Rickson and Watkins (2003) study clearly illustrate the importance of utilizing the neuro-affirming lens (Martin-Moratinos et al., 2023; Saville et al., 2025). The neuro-normative conclusion focuses on correcting inappropriate behaviour while the neuro-affirming conclusion focuses on empathy skill building (Martin-Moratinos et al., 2023; Saville et al., 2025).

- “Music therapy programmes may help some adolescents to interact more appropriately with others and assist in the development of positive relationships with peers” (Saville et al., 2025, p. 18).
- “Music therapy program[s] may help to increase awareness of other people’s feelings” (Martin-Moratinos et al., 2023, p. 5).

The neuro-normative conclusion makes ableist judgements about what is and is not appropriate behaviour, while the neuro-affirming conclusion focuses on the positive impact on the ND individuals themselves. Music therapy can be a helpful tool; however, goals and application need to be neuro-affirming to ensure maximum benefit for ND individuals’ mental health.

Art Therapy. Art therapy can facilitate self-expression, improve focus and attention, build confidence, and help individuals process trauma or stress (Moyer, 2023). Three problematic studies concluded that art therapy can increase impulse control and reduce impulsiveness in children with ADHD (Habib & Ali, 2015, 2020; Shalani et al., 2017). However, the language used in these studies, “suffering with symptoms of ADHD” (Habib & Ali, 2015, p. 30), “ADHD limits their functioning” (Habib & Ali, 2020, p. 74), and “infected by ADHD” (Shalani et al., 2017, title), demonstrates not just a neuro-normative perspective, but an openly ableist and discriminatory perspective that negates any potential positive mental health outcomes

for ND individuals utilizing these therapeutic methods. Studies that utilize art therapy in a neuro-affirming way have demonstrated much higher success rates in improving mental health outcomes for ND individuals (Boyle & Zhvitiashvili, 2022; Moyer, 2023).

Moyer (2023) developed a DBT-informed art therapy group curriculum that focuses on neurodiversity acceptance, mindfulness, emotion regulation, distress tolerance, and interpersonal effectiveness. The flexible framework of DBT-informed art therapy encourages neurodivergence as an aspect of positive identity and utilizes strengths to allow ND clients to build skills, autonomy, and self-acceptance, and interact with their environment (Moyer, 2023). Boyle and Zhvitiashvili (2022) developed a neuro-affirming art-based therapy, designed to address grief, loss, and bereavement in ND youth. This approach provides psychoeducation for parents/carers who struggle to manage and understand the more challenging aspects of ND grief, offers a nonverbal and sensory means of communication, and supports ND bereaved clients who are often isolated in their grieving processes (Boyle & Zhvitiashvili, 2022). These neuro-affirming approaches successfully adapt therapeutic techniques and goals to be more ND-inclusive and meet ND needs.

When music and art therapies utilize neuro-affirming language and practices, mental health outcomes for ND individuals are improved.

Game Therapy. Gamification of therapeutic techniques and interventions has emerged as a viable option in the therapeutic world (Yuliawati et al., 2024). Gamification, integrating more interactive and participatory activities into the therapeutic process, has been shown to increase engagement in therapy and feelings of empowerment, especially in adolescent populations and ND populations (Yuliawati et al., 2024). Due to ND individuals' interest-based nervous systems, utilizing interest- and strength-based approaches is particularly effective

(Dodson, 2023). Therefore, gamification is a neuro-affirming way to engage ND individuals in the therapeutic process.

Video Game Therapy. Video games are being utilized in therapeutic settings to great effect (Evans et al., 2021; Martin-Moratinos et al., 2023; Peñuelas-Calvo et al., 2020). Music in video games has also been found to be beneficial for ND individuals (Martin-Moratinos et al., 2023). Music in video games can improve immersion and flow, rhythm can improve timing skills and immersion, playing music can improve hemispheric synchrony, social skills, aggressivity, and impulsivity, and listening to music can improve academic skills such as arithmetic, drawing, and reading comprehension, as well as attention and disruptive behaviours (Martin-Moratinos et al., 2023). There is even a video game that has been authorized by the FDA to treat ADHD (EndeavorRx®, 2024). If played for approximately 25 minutes a day, 5 days a week, for 4 weeks, EndeavorRx® (2024) has been reported to improve objective attention in ADHD children ages 8–12. EndeavorRx® (2024) is marketed as a low-barrier treatment option as it does not require a prescription, making it easy for clinicians to suggest. It is also enjoyable, engaging to youth, and requires little to no time or effort from parents (Evans et al., 2021). These SECS (safe, easy, cheap, and sensible) solutions make video game therapy very appealing (Evans et al., 2021). However, should video game therapy be ineffective, there can be negative impacts on ND individuals and their families (Evans et al., 2021).

When families spend their time, money, and hope on a service they believe will help their child and it provides no benefit, they often experience hopelessness and a disinclination to seek care in the future because they assume that they cannot be helped. (Evans et al., 2021, p. 127)

If families have neuro-normative expectations that a video game will “cure” their child, they are likely to be disappointed, disheartened, and less likely to seek further treatment (Evans et al., 2021). While video games can be useful therapeutic interventions because they have been shown to provide cognitive benefits and be a source of social connection and immersion, they also pose a risk of encouraging maladaptive behaviours in players and lead to feelings of addiction and time loss (Atherton et al., 2024). When used in a neuro-affirming way, video games can help promote social engagement, understanding, and acceptance (Evans et al., 2021).

Tabletop Role-Playing Games Therapy: Overview. Board games and tabletop role-playing games (TTRPGs) offer even more social interaction between players than video games (Atherton et al., 2024). Additionally, ND individuals are reported to already be playing TTRPGs at rates significantly higher than is typically seen in the general population, making it a great option for interest- and strength-based therapeutic interventions (Atherton et al., 2024). Board games have been shown to be effective in aiding clients with problems such as dementia and anxiety, common ND comorbidities (Yuliawati et al., 2024). Research has found that board games acted as a social lubricant for players, offering a clear system and rules around interactions; especially beneficial for ND individuals (Atherton et al., 2024). TTRPGs, which are similarly beneficial, are increasingly used in therapeutic and educational settings to improve the wellbeing of ND individuals (Atherton et al., 2024).

TTRPG Therapy: Modalities. TTRPGs can provide a safe space for ND individuals to engage in meaningful social interactions with like-minded individuals (Atherton et al., 2024). Role-playing allows ND individuals to rewrite their own life stories through their characters’ adventures, leading to improved self-esteem (Atherton et al., 2024). Utilizing TTRPGs in therapy can be an effective way to integrate therapeutic modalities like interpersonal therapy (IPT) and

narrative therapy to help address communication differences and interpersonal problems, which are more common in ND individuals than their NT peers (Sodano et al., 2019). IPT focuses on improving relationships and interpersonal functioning (Gladding & Alderson, 2016). IPT has been shown to be effective in improving interpersonal problems and has been shown to improve the depression symptoms of ADHD individuals that result from interpersonal conflict (Sawamura et al., 2022; Sodano et al., 2019). Historically, ND preferences for parallel play (playing separately in a shared space) have been pathologized (Atherton et al., 2024). Utilizing TTRPGs in a neuro-affirming therapeutic setting allows therapists to reframe these ableist and neuro-normative perspectives, that contribute to masking and stigmatisation of ND people, from deficits to differences and even strengths (Atherton et al., 2024).

TTRPG Therapy: Psychological Benefits. Researchers have identified several psychological benefits of playing TTRPGs including improved empathy and enhanced creativity, mainly in the domains of originality and uniqueness of responses, as opposed to flexibility and fluency of thinking (Henrich & Worthington, 2023). TTRPGs also increased strategic thinking and ethical reasoning, personal growth regarding the meaning of life, self-expression and self-awareness, friendship maintenance and social connectedness, spiritual fulfillment, and moral development, namely the expression and maintenance of social interests, especially among adolescents and ND individuals (Henrich & Worthington, 2023).

TTRPG Therapy: Social Isolation & Connection. Social connection is just as important to ND people as it is to NT people. However, due to the inherent challenges of navigating a NT world as a ND person, ND individuals often must mask their ND traits to integrate better into the NT social world (Atherton et al., 2024). The struggle to be accepted by others has led ND individuals to change their behaviours or mask their ND traits through insincere or performative

interactions as a way to lessen the pressure to constantly navigate these micro-transactions and to avoid conflict in social situations (Atherton et al., 2024). Research has shown that ND individuals mask more than their NT peers, which places them at greater risk for poor mental health outcomes, including anxiety, depression, and even suicidality (Atherton et al., 2024). Despite wishing to engage socially, insecurities about perceptions of others, making social mistakes, and lack of understanding of the unspoken social rules often prevent ND individuals from participating in social groups and leisure activities (Atherton et al., 2024). For some ND individuals, these negative social experiences represented traumas, leaving a lasting fear of engagement and social rejection (Atherton et al., 2024). ND individuals can even develop social anxiety as a result of a lifetime of adverse social interactions with NTs (Atherton et al., 2024).

Genuine social connection can serve as a protective factor for mental health and help alleviate feelings of loneliness (Atherton et al., 2024). The explicit rules and clear structure of TTRPGs can help to overcome unspoken social rules, remove the invisible walls blocking social engagement, and allow ND individuals to engage with their peers and broaden their social circles (Atherton et al., 2024). Neuro-affirming use of TTRPGs in a therapeutic setting can provide a safe space and supportive social boundaries to help ND individuals constructively engage with others, to find acceptance, to lessen reliance on unhealthy coping strategies like masking and compliance, to build and maintain friendships, and to combat loneliness and social isolation (Atherton et al., 2024). ND individuals often find socialising with other ND individuals more comfortable because of common interests, similar communication styles, and the ability to fully unmask, which, by extension, decreases the risk of Autistic/ADHD burnout and poor mental health (Atherton et al., 2024). Research has shown that ND individuals feel an innate kinship with other ND individuals that is supportive and understanding which removes pressure to act in

a certain way (Atherton et al., 2024). TTRPGs can provide an opportunity for ND individuals to develop healthy, non-masked social relationships (Atherton et al., 2024). The cognitive reframing that occurs when internalized social “rules” are rejected in neuro-affirming therapeutic TTRPGs can promote self-compassion and posttraumatic growth and can improve ND individual’s mental health (Atherton et al., 2024).

TTRPG Therapy: Skill-Building. TTRPGs are a fun and engaging way of building empathy through perspective-taking, building self-efficacy and self-acceptance through self-reflection, and exploring emotions surrounding experiences involving marginalization and discrimination, equality and justice, advocacy and mercy, and rejection and trauma (Atherton et al., 2024). TTRPGs can improve cooperation, negotiation, consideration, communication, conflict resolution, teamwork, empathy, and ability to navigate sensitive topics (Atherton et al., 2024). Research has shown that these social competence skills built in therapeutic TTRPG sessions are transferable to the real world (Atherton et al., 2024). TTRPGs promote cognitive and psychosocial skills and can help alleviate the negative impacts of stress, social anxiety, depressive symptoms, and discrimination against neurodivergence (Yuliawati et al., 2024). While perceptions may hinder TTRPGs from being recognized as a therapeutic tool, in cultures where there is a stigma against mental health that hinders help-seeking behaviour, TTRPGs can provide an effective alternative therapeutic intervention (Yuliawati et al., 2024). TTRPGs can enhance cognitive performance, creativity, empathy, problem-solving skills, perspective switching, the development of social skills, can serve as a catharsis of emotions, and can positively impact identity formation through self-reflection (Yuliawati et al., 2024). Therapists utilizing TTRPGs in the therapeutic setting can observe clients’ patterns of behaviour and thoughts which they can then use to set goals and address any issues after the session (Yuliawati

et al., 2024). The post-session debriefing process serves as a bridge for players to transfer skills acquired in the game to real-life situations (Yuliawati et al., 2024). Additionally, skill transfer takes time, thus long-term participation in TTRPGs is essential to enhance the positive impacts (Yuliawati et al., 2024).

TTRPGs provide an environment where shared common interests can allow ND individuals to circumvent the type of small talk they often struggle with and engage in successful group interactions (Atherton et al., 2024). Participation in neuro-affirming therapeutic TTRPGs can help ND individuals gain the skills and confidence to socialize successfully with ND and NT peers, which in turn will decrease loneliness and improve mental health (Atherton et al., 2024).

TTRPG Therapy: Bleeding. Emancipatory bleed is a term used to describe how people in TTRPGs can use the hero's journey to rewrite their personal histories (Atherton et al., 2024). Research suggests that "bleeding," which involves blurring or even losing one's sense of self, can, in fact, have restorative effects on one's identity because individuals can explore their own identities, emotions, strengths, and struggles in a safe environment (Atherton et al., 2024). Additionally, pre-transitional players were able to explore gender expression and identification in a safe environment which often gave them the confidence to transition in real life (Atherton et al., 2024). Bleeding in TTRPGs can also improve empathy because it allows individuals to take on different personas and experiment with divergent personalities in a way that broadens worldviews (Atherton et al., 2024).

This bleeding or character enmeshment allowed ND individuals to explore experiences with marginalization, strengthen their self-concepts, explore hidden strengths and advantages, even when they seemed weak or disadvantaged (a common trope in D&D narratives; Atherton et al., 2024). It allowed them to "explore their mental dungeons and slay their psychic dragons"

(Atherton et al., 2024, p. 3). This allowed them to develop the confidence to confront their “demons” in their real life, interact within a world where their ND identity neither stigmatised nor disabled them (which increased self-efficacy), and explore “the best version” of themselves where their disabilities or differences were no longer negatively perceived (Atherton et al., 2024). When used in a therapeutic setting, TTRPGs are a very neuro-affirming way to enhance mental health outcomes in ND individuals.

TTRPG Therapy: Limitations. However, there are some weaknesses of TTRPGs as a psychological intervention (Yuliawati et al., 2024). The psychological benefits of TTRPGs are likely to be experienced only by individuals who genuinely enjoy the gaming process (Yuliawati et al., 2024). The rules are complex and may not be suited for those with neurological differences (Yuliawati et al., 2024). Unrestricted fantastical self-expression may exacerbate preexisting psychosis or derealization, and differences between individualistic vs collectivist cultures may negatively impact play (Yuliawati et al., 2024). There are also some critiques of TTRPGs due to their character stereotyping or westernized story construction that may disincentivize BIPOC people to play (Yuliawati et al., 2024). Fortunately, there has been an effort to decolonize TTRPGs (Alexander, 2021). For example, *Coyote & Crow* follows an indigenous storyline set in an alternative future where colonialization never happened (Alexander, 2021).

TTRPG Therapy: Societal Benefits. ND individuals are often marginalised in society due to not fitting NT standards and are forced to mask ND behaviours in a one-sided endeavour to belong (Atherton et al., 2024). This lack of reciprocity towards understanding and acceptance of ND perspectives is commonly referred to as the double empathy problem (Milton et al., 2022). TTRPGs may be a viable way improve bidirectional communication between ND and NT people as they encourage the mixed-neurotype groups to creatively problem-solve (Atherton et al.,

2024). TTRPGs focused on exploring ND strengths and identities could also serve as a microcosm to further investigate how various settings, such as educational and professional environments, could benefit from neurodiversity inclusion (Atherton et al., 2024). This neuro-affirming approach to game therapy benefits not only ND individuals, but society as well.

TTRPG Therapy: Summary. Overall, TTRPGs offer a safe environment where ND individuals can improve social and communication skills, develop healthy self-identities, practice empathy, enhance creativity and problem-solving skills, practice decision-making and self-reflection, enhance meaning-making processes, learn to effectively identify and express emotions, and explore their ideal selves without any judgement or labels from others (Yuliawati et al., 2024). TTRPGs can serve as a neuro-affirming therapeutic tool for ND individuals to lessen stress, social anxiety, depression, and social isolation (Yuliawati et al., 2024). Neuro-affirming, interest- and strength-based approaches, such as gamification of therapeutic processes, can greatly benefit ND individuals and help improve their mental health outcomes far more than neuro-normative goals and techniques.

Conclusion

When a neuro-affirming framework is applied to therapeutic techniques such as psychoeducation, mindfulness and somatic approaches, and interest- and strength-based approaches are adopted, ND mental health outcomes improve. Specifically, with regards to psychoeducation, research has found that the negative beliefs, prejudicial attitudes, and stereotypes about ADHD can discourage ND individuals from seeking support (Barton, 2021; Godfrey et al., 2020; Jones et al., 2021; Meza et al., 2019; Nguyen & Hinshaw, 2020; Sanderson, 2021). Neuro-affirming psychoeducation facilitates understanding, validation, and community support which are all powerful healing tools (Chapman & Bovell, 2022; Jones et al., 2021;

Maftai et al., 2024; Matthies et al., 2016; Pantazakos, 2023; Sanderson, 2021). Neuro-affirming mindfulness and somatic techniques are a key component of managing executive dysfunction and helping to regulate emotions and behaviours (Cairncross & Miller, 2016; Halmøy et al., 2022; Haydicky et al., 2013; Xue et al., 2019). Interest- and strength-based techniques are neuro-affirming by nature as they celebrate uniqueness and strengths. Music therapy can help regulate emotions, encourage social interaction, enhance communication, and improve motor skills in ND individuals (Martin-Moratinos et al., 2023; Saville et al., 2025). Game therapy can help ND individuals improve interpersonal problems, conflict resolution, communication skills, confidence, self-acceptance, and self-esteem (Atherton et al., 2024; Evans et al., 2021; Yuliawati et al., 2024).

Applying the neuro-affirming framework to various therapeutic techniques would benefit ND individuals by reducing distress and harm and improving overall wellbeing (Chapman & Botha, 2022; Chapman & Bovell, 2020). Celebrating strengths and working with differences could improve ND individuals' mental health outcomes (Chapman & Botha, 2022; Chapman & Bovell, 2020). Application of a neuro-affirming framework in therapeutic practice benefits ND individuals through support, celebration, affirmation, understanding, and acceptance.

Neuro-Affirming Ethical Considerations

In Alberta, psychologists follow the *Canadian Code of Ethics for Psychologists* outlined by the CPA (2017) and more specifically, the *Standards of Practice* outlined by the CAP (2022). When caring for ND individuals in therapeutic practice, it would be beneficial to highlight a few specific ethical guidelines.

Non-Discrimination & Advocacy

Several studies have demonstrated NT individuals have implicit bias when it comes to ND individuals and are less likely to “like” or want to socialize with ND individuals (Alkhaldi et al., 2021; Alkhaldi et al., 2024; Sasson et al., 2017). The most common reasons that ND individuals received more negative first impressions than NT individuals were given as lack of readability, perceived awkwardness, and appearance of lack of empathy (Alkhaldi et al., 2021; Sasson et al., 2017). Increased expression of ND traits was negatively correlated with readability, likeability, social perception, and social desirability (Alkhaldi et al., 2024). Unlike their NT counterparts, and despite evidence of internalized stigma, ND individuals also rated themselves as less likable than their NT counterparts (DeBrabander et al., 2019). ND individuals’ lower likeability scores did not impede their social desirability scores, demonstrating a greater empathy towards differences (DeBrabander et al., 2019). It is critical that mental health professionals become aware of these implicit biases and take steps to address them as non-discrimination is a key ethical standard (I.9-I.11; CPA, 2017).

It is important to note that diagnostic disclosure improved ND individuals’ likeability scores when rated by unbiased NT participants (Jones et al., 2021; Morrison et al., 2019; Sasson & Morrison, 2017). However, diagnostic disclosure worsened impressions made by NT raters with high scores for stigma towards ND individuals (Morrison et al., 2019). The language of the diagnostic label (person-first [has autism] or identity-first [Autistic]) did not impact results (Morrison et al., 2019). NT perceptions and biases can shape the social experiences of ND adults and thus reducing stigma and increasing acceptance can help to improve the social and emotional wellbeing of ND individuals (Morrison et al., 2019). One way to decrease stigma and discrimination faced by ND individuals and to improve inclusive attitudes is to implement neuro-

affirming acceptance training programs (Jones et al., 2021). Evidence shows that NT individuals who participated in training programs designed to increase ND acceptance and knowledge showed more social interest and social desirability in ND individuals (Jones et al., 2021). Importantly, this improvement occurred despite NT participants' unawareness of diagnostic status, suggesting no influence of demand characteristics (Jones et al., 2021). Mental health practitioners wishing to uphold ethical standards, challenge stigma, advocate for their ND clients, and foster further development of systemic and societal views can participate in and facilitate neuro-affirming awareness training programs (IV.19-IV.28; CPA, 2017). Neuro-affirming awareness and acceptance programs such as these benefit ND individuals by challenging stigma and discrimination, advocating for acceptance and accommodation, encouraging awareness and understanding, and can hopefully help impact policy and create change (Chapman & Bovell, 2022).

Cultural Competence & Continuing Education

General competency (II.6-II.12; CPA, 2017), cultural competency (19.1-19.3; CAP, 2022), and self-reflection are all important ethical guidelines to follow when working with ND clients. Not only are mental health practitioners expected to have knowledge of various therapeutic modalities and techniques and be capable of using them effectively, but they are also expected to demonstrate cultural competence, which involves understanding and respecting unique cultural backgrounds (CPA, 2017; CAP, 2022). Awareness and acceptance of ND culture, including language preferences and intersectional factors, is critical when using a neuro-affirming lens. Rather than solely applying the neuro-affirming lens, Chapman and Botha (2022) proposed the development of NIT that resists default normalization, is sensitive to neurodivergent perspectives, understands disablement as relational and political, and considers

disability as a source of community and pride. This is a great example of cultural competency (19.1-19.3; CAP, 2022) and advocacy (IV.19-IV.28; CPA, 2017) in practice. Culturally competent counsellors can create a safe and supportive space by engaging in personal and professional development, respecting clients' beliefs and attitudes related to presenting concerns and treatment options, demonstrating curiosity, acknowledging microaggressions and systemic discrimination, and helping to foster self-acceptance (Akubuiro et al., 2023; Khan et al., 2023; Miller et al., 2022; Minnis, 2021).

Ongoing professional development is one way to maintain competence, especially cultural competence, that can greatly benefit ND clients (CPA, 2017; CAP, 2022). One of the benefits of learning to apply the neuro-affirming lens is that psychologists can still leverage existing education, expertise, and techniques. The neuro-affirming lens allows practitioners to modify their view of the problem and thus utilize existing skills and knowledge in more appropriate and beneficial ways. Including neuro-affirming learning in continuing education programs (II.9, IV.21; CPA, 2017) and professional development plans (4.7-4.12; CAP, 2022) would be an excellent way for mental health practitioners to uphold ethical standards and better serve their ND clients. Facilitating discussions or learning about the neuro-affirming lens would help mental health practitioners develop deeper knowledge and understanding for themselves and others (IV.1-IV.9; CPA, 2017), further benefitting the psychological community and ND clients.

Maximize Benefit & Minimize Harm

To maximize benefit to ND clients, mental health practitioners can use the neuro-affirming lens to build an effective therapeutic alliance (II.18-II.27; CPA, 2017). ND clients need mental health practitioners who are accepting and understanding, who celebrate diversity, who are respectful of identity politics and language preferences, who demonstrate flexibility and

curiosity, who are mindful of not encouraging neuro-normative over-adaptation and who allow unmasking, who provide clarity and direction without judgement or discrimination, and who are mindful of diverse processing and sensory needs. The neuro-affirming lens maximizes benefit for ND clients by recognizing strengths, tailoring interventions, and promoting empowerment (II.18-II.27; CPA, 2017). It has been suggested that a combination of neuro-affirming pharmacological and psychosocial interventions, parenting training, ADHD/ASD coaching, classroom accommodations, and cross-neuro-cultural communication skills training would be most beneficial in producing positive therapeutic outcomes for ND clients (CADDAC, 2019).

Bowers and Widdowson (2023) described four main factors ND clients need to have a successful therapeutic experience: understanding and acceptance, safety to unmask, balance of tolerable structure and tolerable nurture, and therapy that is different to historical relationships that have felt shaming, unsafe, or conditional. Meeting these conditions can help minimize harm to ND clients (II.28-II.39; CPA, 2017). When therapeutic goals and techniques resist neuro-normalization, harm can be minimized by reducing stigma, increasing self-acceptance, and improving overall wellbeing (II.28-II.39; CPA, 2017). Expecting neuro-normative behaviours (i.e., eye contact or sitting still), failing to adopt client preferred language (i.e., identity-first language), and utilizing a neuro-normative view of “problematic” behaviour, can all inadvertently cause harm to ND clients by encouraging masking, identity separation, or stigmatization (Hanley et al., 2023). Pathologizing behaviours, like stimming, may encourage masking (behaving in a NT manner to conform to social norms) which can lead to burnout, anxiety, or self-esteem issues (Hanley et al., 2023). Prioritizing neuro-normative therapeutic goals and interventions can invalidate the ND client’s identity and cause emotional harm, even trauma (Chapman & Bovell, 2022). Minimizing harm for ND clients includes offsetting or

correcting harm (II.40-II.47; CPA, 2017). If a client has developed internalized shame, self-stigma, or trauma due to previous societal or therapeutic treatment, it is an ethical imperative to mitigate that harm by helping clients confront those negative feelings, learn to unmask, and work with their brain rather than against it (Chapman & Botha, 2022).

Reflections on Personal Learning

One of my goals for this capstone was to develop a stronger knowledge base of therapeutic modalities and techniques that are neuro-affirming and scientifically supported. Through this capstone I have found several modalities and techniques that can be made to align with the neuro-affirming lens that I espouse and use in my therapeutic practice as well as my daily life. As a neurodivergent individual who has been working professionally with neurodivergent clients for some time, I feel confident in utilizing the neuro-affirming lens in my practice. The intention of this paper was to deepen my understanding, enhance my confidence, and discover additional practical tools to use with clients. Utilizing the neuro-affirming lens is well within my scope of practice, and I hope that this capstone demonstrated the ease with which other mental health practitioners could learn to apply the neuro-affirming lens effectively and ethically.

Having processed my own feeling of shame surrounding disability and neurodivergence in my teens, this capstone has helped me further my goal of continuing to foster acceptance and understanding of neurodivergence. I am excited to continue to apply the neuro-affirming lens to the various modalities and techniques I use in my own practice and continue to experience firsthand the benefits the use of this lens provides for my clients. I am also curious to see future research that continues to build upon these neuro-affirming principles and collects evidence about the positive impacts of its usage.

I was unsurprised to discover my reaction to use of neuro-normative goals in therapeutic practice was outrage at the discrimination, mistreatment, and lack of understanding. It is those same passionate feelings that led me to write this capstone and start my business, Understanding ADHD™. The use of this neuro-affirming lens demonstrates cultural competence that is an ethical standard for all psychologists. Through writing this capstone, I have reaffirmed my passion and advocacy for this topic and reasserted that I am on the correct path in my life and my career. I am eager to continue to learn more about how I can provide the best possible care for my ND clients.

Conclusion

This capstone answers the research question: would shifting the paradigm of understanding surrounding neurodiversity improve therapeutic treatment outcomes for ND individuals? The importance of shifting the paradigm of understanding surrounding neurodiversity has been discussed in detail throughout this capstone. Utilizing the neuro-affirming lens in therapeutic practice will greatly benefit ND individuals. Current therapeutic modalities, goals, and techniques subscribe to the medical model of disability and fail to champion acceptance and understanding, thus depriving ND clients of accommodating, neuro-affirming service options. Evidence from studies that utilize the neuro-affirming lens when developing experiments and designing outcome measures have demonstrated the effectiveness, ease, and benefit of applying the lens. To further solidify the effectiveness of the neuro-affirming lens, studies could be performed that compare the effectiveness of the two frameworks to determine if the neuro-affirming lens were truly superior in all cases. With explicit scientific evidence supporting the superiority of the neuro-affirming lens over current neuro-normative

practices, implementation of the application of the neuro-affirming lens could be achieved swiftly through policy and education changes.

A simple perspective shift away from pathologization towards understanding and acceptance could be made standard practice across all health professions, which would greatly benefit ND individuals and their health outcomes. Applying the neuro-affirming lens would improve mental health outcomes by promoting acceptance, understanding, self-compassion, empathy, and societal change that would result in less discrimination and distress. This capstone has clearly demonstrated the urgent need for the implementation of inclusive, accommodating, neuro-affirming practices in the mental health profession to meet ethical and best practice standards when working with ND individuals. Counselling practices could be improved through reconceptualization of dysfunction, emancipation of ND people from neuro-normativity, acceptance, understanding, and celebration of neurodivergence and disability, and humility and curiosity regarding different experiences of neurodivergence and disablement (Chapman & Botha, 2022). Acceptance, understanding, and celebration can lead to ND individuals' empowerment and improved wellbeing.

Application of the neuro-affirming lens is the key to improving ND experiences and outcomes in therapeutic settings. I am excited to continue using this neuro-affirming framework in my own practice to help foster understanding, acceptance, and celebration of neurodivergence. I hope other therapists will join me in using the neuro-affirming lens to help create an inclusive therapeutic environment for everyone. It is my firm belief that the application of the neuro-affirming framework to therapeutic practice will create individual and systemic improvements to mental health treatments and outcomes for ND individuals.

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Appendix A

Literature Review Annotated Bibliography Examples

A sample of the summary of my literature research approach, including article titles, methodologies, key themes, and my inferences.

Table 1

Literature Review Annotated Bibliography Examples

Title	In-text citation	Methods	Reliability	Validity	Lens	Key themes/results	My notes
Behavior Management of a Child With Attention Deficit Hyperactivity Disorder (ADHD) in the Classroom: A Case Study	(Dorji, 2021)	Interview, observation, documentation	Followed documented case study protocols	Novice researcher, data convergence	NN	ABA improved classroom management of ADHD kids	Observations based on external observer; no data collected on mental well-being of ND individuals
Effect of a Solution-Focused Approach on Self-Efficacy and Self-Esteem in Turkish Adolescents With Attention-Deficit/Hyperactivity Disorder	(Karakaya & Özgür, 2019).	Mixed design of qualitative & quantitative research methods; randomized groups	Reliability coefficient: 0.75	Validity coefficient: 0.71	NA	SFBT significantly improved self-efficacy and self-esteem in ADHD individuals	Beautiful science & data analysis; NA goals and outcome measures
Dialectical Behavioral Therapy-Based Group Treatment Versus Treatment as Usual for Adults With Attention-Deficit Hyperactivity Disorder: A Multicenter Randomized Controlled Trial	(Halmøy et al., 2022)	14 week randomized controlled trial; BRIEF-A, DERS, ASRS, AAQoL, BDI, BAI, AUDIT, DUDIT scales	Well documented study & analysis protocols	Used several previously validated scales	NA	DBT reduced executive dysfunction	Study focused on managing symptoms rather than symptom reduction

Multiple Family Therapy for Chinese Families of Children With Attention Deficit Hyperactivity Disorder (ADHD): Treatment Efficacy From the Children’s Perspective and Their Subjective Experiences	(Ma et al., 2018)	Experimental and control group; PCS, CHS, PCR, SSSS scales	Reliable scales used	Valid scales used; alternative scales may have been more appropriate	NA	Multiple family therapy focused communication, understanding, & acceptance resulted in improved family communication, social acceptance, fun, & safety; no significant improvements in perception of competence, hopefulness, familial relationships, or social support	Considered children’s perspective, not just parents; scales used were not indicative of how effective the treatment was; self-esteem and feelings of acceptance may have been better things to measure
Exploring the Intersection of ADHD and Music: A Systematic Review	(Saville et al., 2025)	Meta-analysis, systemic review	Reliability varied across studies; search results methods reliable	Validity varied across studies; conclusion validity questionable due to lens	NN	Interpreted various studies on ADHD & music using a NN lens; found music generally benefits ADHD	Contrasted this study with another meta-analysis that was neuro-affirming; differences in conclusions were drastic

Note. AAQoL = Adult ADHD Quality of Life Scale; ABA = applied behaviour analysis; ASRS = Adult ADHD Self-Report Scale; AUDIT = Alcohol Use Disorders Identification Test; BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; BRIEF-A = Behavior Rating Inventory of Executive Function – Adult Version; CHS = Chronic Health Scale; DBT = dialectical behaviour therapy; DERS = Difficulties in Emotion Regulation Scale; DUDIT = Drug Use Disorders Identification Test; NA = neuro-affirming; NN = neuro-normative; PCR = Perceived Control of Recovery; PCS = Pain Catastrophizing Scale; SFBT = solution-focused brief therapy; SSSS = Social Support Satisfaction Scale.

Appendix B

Useful Neuro-Affirming Resources

A list of useful neuro-affirming, psychoeducational resources for self-directed learning about neurodiversity and the neuro-affirming lens.

Table 2

Useful Neuro-Affirming Resources

Title	Summary	Website	In-text citation
Understanding ADHD	Neuro-affirming therapy, assessment & coaching services	https://www.understandingadhd.ca/	(Morton, 2025)
Hypercast: An ADHD Podcast	Real-life stories, science-backed strategies, and humour come together to help listeners thrive with ADHD and embrace their unique minds	https://www.hypercastpod.com/	(Snider & Morton, 2024-present)
Mini ADHD Coach	Illustrated content to help you learn about ADHD	https://www.theminiadhdccoach.com/	(Gendron, 2025)
ADDitude Magazine	Quarterly magazine containing feature and service articles about ADD, ADHD and comorbid conditions including depression, anxiety, and learning disabilities like dyslexia.	https://www.additudemag.com/	(ADDitude, 2025)
CHADD	Tools, strategies, and support for adults, parents, teachers, and employers to help navigate the complexities of ADHD.	https://chadd.org/	(CHADD, 2025)
How to ADHD	Videos with evidence-based tools & information to empower ADHD brains.	https://www.youtube.com/@HowtoADHD	(McCabe, 2025)