HOW DO MENTAL HEALTH PROFESSIONALS PROVIDE THERAPY TO COUPLES IN NEURODIVERSE RELATIONSHIPS: A CONSTRUCTIVIST GROUNDED THEORY STUDY

Ву

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A dissertation submitted in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILSOPHY

WASHINGTON STATE UNIVERSITY College of Nursing

DECEMBER 2023

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ACKNOWLEDGMENT

It is important for me to thank my PhD advisor and committee chair, Dr. Gail Oneal, who gave me far more than advice. Working on research during Covid-19 was not easy; university libraries were closed. So many people were afraid and needed help. I helped them, and Dr. Oneal helped me. Dr. Oneal gave me video-conferencing hugs when I was overwhelmed and laughed with me at inside jokes. Her words were always kind and her feedback always encouraging. I learned more from Dr. Oneal than methodology and the mechanics of research integrity. She is a straight shooter, grounded, and always spoke her mind no matter who was in the room. She showed me the value of an authentic self. It is an intangible gift that few would understand. Thank you.

I thank all my committee members, Dr. Landis, Dr. Katz, and Dr. Strand for joining my journey and staying with me to the end. I don't want to overlook our department administrator, Tami, whose value was immeasurable. Her attention to the administrative details that I would inevitably forget gave me a safety net so I could focus on my research.

I would like to acknowledge the professional advice, long discussions, and friendship from Dr. Reis in Australia. Thank you for selflessly offering advice and giving my direction perspective.

I have enormous gratitude for my Medical Outreach of America team. Thank you to Dr. Stamler, Dr. Debbie Weinstein, Donna Williams, and Steve and Teri Mason for your friendship; ongoing encouragement and support; and the endless opportunities to expand my leadership acumen, hone my presentation skills, and nurture my lifelong humanitarian commitment. And to the children in orphanages around the world to whom I have donated healthcare, someone does care. I care.

Finally, with utmost humility, I would like to acknowledge myself. I have overcome substantial hurdles during my life and this journey, cried many tears, and still, every day I went back to my desk and studied. I'm glad I did it.

HOW DO MENTAL HEALTH PROFESSIONALS PROVIDE THERAPY TO

COUPLES IN NEURODIVERSE RELATIONSHIPS: A CONSTRUCTIVIST

GROUNDED THEORY STUDY

Abstract

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December 2023

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This study examines the social processes mental health professionals use to counsel neurodiverse

couples. While the prevalence of autism continues to rise in all areas of society, therapists are in

uncharted waters in the world of couples therapy. Neurodiverse couples are the nascent challenge

in mixed relationships, where one partner is on the spectrum and the other partner is

neurotypical. Some partners with autism may not know they have autism. Neurodiverse couples

have unique challenges not found in other relationship dyads. National guidelines have not yet

been established. A constructivist grounded theory framework uses guided interviews to

understand the processes therapists use to develop effective therapy. Key categories emerged

including belief systems, training, and communication, and which served as underpinnings that

guided therapists. This study uncovers a duality of pathways inspired by personal epistemologies

which drive decision-making. A social-justice component emerges from the data that is

unexpected. This research highlights disparities associated with how therapists understand and

assimilate the complexities of neurodiverse relationships. The findings demonstrate a need for

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professional guidelines for practice. They show a need for professional certification of skills specializing in autism-informed knowledge for mental-health practitioners. Professional agencies lack a global reference of autism-informed knowledge and evidence-based strategies for adults with autism. This highlights the implications from this research. Service professionals who work with people need autism-informed knowledge to practice competently and effectively, and to prevent unintentional harm. Nursing programs that prepare nurses with autism-informed knowledge will forge a significant, positive experiential impact on healthcare and outcomes for patients with autism, neurodiverse couples, and their families. Nurses at the frontline of healthcare will have the skill set and tools to provide tailored neurodevelopmental-specific care, collaborate with autism-informed multidisciplinary teams, and advocate for the diagnosed and undiagnosed neurodiverse patient population.

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Dedication

I dedicate this dissertation to my sweet children, Johannez and Calista who never wavered with their support and acts of love. My two English bulldogs, Henri von Finckenstein and Maximus Hesselheffe von Finckenstein, who I am convinced are little humans disguised in dog costumes. They would sit at my feet during my all-nighters and during the day they would come into my office and push their little faces between my legs to force me to get up from my desk to take them for a walk. It probably saved my life, but I didn't see it that way at the time. To my friends,

Dr. Rick, Michele, Ron, Kathy, and many others who gave unconditional support and encouragement. And finally, to any woman who is given never-ending reasons why she can't or shouldn't pursue her dreams, and she gets up and does it anyway. My motivation, perseverance, and self-driven determination were energized by two such women:

Dr. Grunya Sukhareva and Czeslawa Kwoka.

I never met you, but you are my inspiration.

Thank you

CHAPTER ONE: INTRODUCTION

Estimates show that doctors diagnose 1 in 6 children with one or more developmental disabilities in the United States (Centers for Disease Control and Prevention [CDC], 2023-f, April 4). Autism spectrum disorder (ASD) is one of the fastest-growing developmental disabilities diagnosed in the United States (Massachusetts General Hospital for Children, 2023). Prevalence of autism trended upward from 1 in 44 in 2018 to 1 in 36 by 2020 (CDC, 2023-f, April 4; Maenner et al., 2023). The debate in the literature questioning whether autism was an epidemic or normative variant continues; however, financial burdens related to therapy, limited qualified resources, emotional strain, and social impact give pause to consider the public-health impact of ASD (Li et al., 2022).

It is estimated that almost 5.5 million adults with autism live in the United States (CDC, 2022-c, April 7; Dietz et al., 2020). This estimation is based on simulation from current ASD data for children and a Bayesian hierarchical prediction model that calculated conditional probability from given knowledge of ASD data (Cruise, 2013; Dietz et al., 2020; Joyce, 2003). Most adults with ASD do not have a diagnosis because the United States has not yet instituted a surveillance system to monitor prevalence of ASD in adults (CDC, 2022-c, April 7; Dietz et al., 2020).

ASD is a permanent neurodevelopmental disorder with varying degrees of disabilities that incur substantial direct and indirect economic, personal, and community costs to support the autistic individual over their lifetime (Buescher et al., 2014; Dietz et al., 2020). Adult diagnosis is important for allocation of resources to adults who are autistic and need the support.

Depending on when data is collected, an estimated range of 70,700 to over 111,000 adolescents with autism will enter adulthood each year with a projection estimate of 707,000 to 1,116,000

more adults with autism over the next 10 years (Shattuck, 2019; White et al., 2021). Recent prevalence studies reflected 1 in 36 children are diagnosed with ASD and the CDC estimated 1 in 45 adults are autistic but may not be aware of their autism (CDC, 2022-c, April 7; Dietz et al., 2020; Maenner et al., 2023).

As the growing number of adults with autism becomes known to public health, the attention to the coinciding numbers of adults with autism who were in or entering into relationships with partners who do not have ASD, also known as neurotypical (NT), gives mental healthcare professional therapists a barometer of demand for couples living with diverse neurologies. The volume of older adults with autism who hide in plain sight in our communities and in neurodiverse relationships is staggering (Brugha et al., 2011). The cumulative number of current undiagnosed or misdiagnosed adults with autism spanning all generations is extensive. The demographic of adults with autism is rapidly expanding (U.S. Department of Health and Human Services, 2017; Interagency Autism Coordinating Committee, 2019-b). These growing numbers of adults with autism enter into relationships with NT partners. This study looked at the process mental healthcare professionals use to provide therapy to couples in relationships where one adult is autistic, and the other partner is neurotypical. Providing therapy to couples with very different neurologies has specific challenges to consider that are outlined in this study.

Definition of Terms

Asperger's Syndrome

Although Asperger's syndrome is no longer recognized by the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013b) it is still used in non-scholarly vernacular, on websites, and sometimes in the literature. It is a term that falls under the umbrella of the "spectrum of autism." Prior to the DSM-5, Asperger's syndrome

(AS) was defined by the same diagnostic criteria as autism, but AS individuals were not burdened with language or intellectual deficits (World Health Organization [WHO], 2015). In DSM-5, Asperger's syndrome merged from a stand-alone disorder to autism spectrum disorder—with or without language or intellectual deficit.

Autism Spectrum Disorder

Autism spectrum disorder is a neurodevelopmental disorder defined by the clinical presentation of specific behaviors. The diagnostic criteria of these core behaviors, as outlined by the DSM-5, are impairment with social communication; restricted and repetitive behaviors; and impairment in developing, maintaining, and understanding relationships. ASD has three levels of severity and two subtypes: with or with intellectual impairments and with or without language impairment. It is often associated with one or more co-occurring neurodevelopmental, mental, or behavioral disorders: attention-deficit disorder (ADHD), anxiety disorder, developmental coordination disorder, disruptive behavior disorder, impulse control disorder, conduct disorder, depressive disorder, bipolar disorder, tics, Tourette's disorder, self-injury, gastrointestinal disorders, sleep disorders, metabolic syndrome, epilepsy, and many others (Academic Autism Spectrum Partnership in Research and Education, n.d.; Ousley & Cermak, 2014).

Adults with Autism

Some in the autistic community prefer the identity-first nomenclature "autistic adult" rather than the person-first "person with autism." Autism is a neurodevelopmental difference in the brain and cannot be separated from the person. Some terms such as "person with homosexuality" or "people with femaleness" are irrational descriptors, and person-first language is not preferred by some autistic individuals. "I am autistic because autism is an essential feature of me as a person" (Sinclair, 2013, p. 2). It is important to address preferences with one's

audience as communication using person-first or identity-first language is personal. Academic and research-based writing always ensures respect for the diverse preferences of their audiences. Person-first language became law in 1990 with the Americans with Disabilities Act and is considered best practice when referring to people with physical and mental health disorders (Wooldridge, 2023). This research paper was respectfully written in person-first language with highest regard for individuals who subscribe to identify-first language.

Neurodiversity

Neurodiversity is a concept of neurological differences. Autism is considered a variation of brain neurology. The relationship of a person with autism and a person without autism (ASD/NT) is a neurodiverse relationship, or a relationship with diverse neurologies (National Symposium on Neurodiversity at Syracuse University, n.d.).

Neurotypical

Neurotypical literally means *neurologically typical*. It represents average cognitive functioning that is considered typical for the average person. Neurotypical is a term that was created by the autistic community to refer to people without autism (Disabled World, 2020).

Background

Autism spectrum disorder is a life-long, pervasive neurodevelopmental and neuropsychiatric disorder (American Psychiatric Association, 2013a; Moos et al, 2016) with varying degrees of severity of cognitive, psychological, social, and behavioral deficits. The diagnostic criteria for ASD involve persistent deficits in three primary areas with subcategories of severity in each area (American Psychiatric Association, 2013b): socio-emotional reciprocity, social communication, and social interaction that includes social relationships and patterns of behavior. Studies have indicated multiple psychiatric co-occurring disorders that often

accompany this one (Hofvander et al., 2009; Russell et al., 2016). An ASD diagnosis may coexist with gelotophobia (fear of being laughed at; Leader et al., 2018; Samson et al., 2011), as well as other examples that included synaesthesia (one sensory perception triggers another; for example, the number *two* may trigger the color *red*; Baron-Cohen et al., 2013; Ward et al., 2018); anxiety (Leader et al., 2018; Russell et al., 2016); depression (Uljarević et al., 2019); obsessive-compulsive disorders (Hollocks et al., 2018; Russell et al., 2016); social phobia (Hollocks et al., 2018); attention deficit disorder (Kernbach et al., 2018; Vaidya et al., 2019); or alexithymia (a lack of emotional self-awareness, emotional awareness in others, and a paucity of empathy; Bird & Cook, 2013; Gaigg et al., 2016; Poquérusse et al., 2018).

Living with mental health disorders and/or having autism may be a risk factor for post-traumatic stress disorder (PTSD) for the person with autism (Brewin et al., 2019; Fuld, 2018; Haruvi-Landan et al., 2018, 2019; Kerns et al., 2015; Rumball et al., 2020). The NT partner is at risk for secondary traumatization (Baranowsky et al., 1998; Dirkzwager et al., 2005). Secondary traumatization is "any transmission of distress from someone who experienced a trauma to those around the traumatized individual" (Galovski & Lyons, 2004, p. 478). The neurotypical partner in a relationship with an adult with autism is "at risk" for numerous mental health issues including social isolation, depression, life-threatening crisis, and complex post-traumatic stress disorder (Bostock-Ling, 2017; Deguchi & Asakurs, 2018; Lanius et al., 2011; Lorant, 2011; Millar-Powell, 2015; Rench, 2014). The mental health nurse practitioners and other mental health professionals who provide therapy need a thorough appreciation of the complex nature of autism to navigate the intricate dynamics of these very different neurologies.

Neurotypical as a term was developed by autistic communities to differentiate people who are not autistic or who have brain neurology that is within a typical range for average people

(Disabled World, 2020). Currently, statistics on neurodiverse relationships are not available. Autism support groups such as the Asperger/Autism Network have reported an increase in the number of neurodiverse couples who seek help (Myhill & Friedman, 2019). There are no national guidelines for mental health nurse practitioners and other mental health professionals to assess or manage neurodiverse relationships. There is a vital need to explore the experiences of neurodiverse couples, to understand how to support and provide therapy for neurodiverse relationships, and by extension, to support other mixed neurological relationships such as those between patients with autism and their healthcare professional. The intent of this study was to probe the current landscape of mental health nurse practitioners who provide counseling for neurodiverse couples and uncover the social processes mental health nurse practitioners and other mental health professionals use to provide therapy that would augment healthy synergy between neurologically diverse couples.

Mental health professions recognize multiple professional identifications that provide counseling services. Counselors and (psycho)therapists are terms often used interchangeably; psychiatric mental health nurse practitioner, licensed clinical social workers, and marriage and family therapists were recognized as qualified mental health professionals. Counseling distinctions or limitations that define each professional identification are determined by scope of practice as set by their respective licensing and credentialling boards (Cottone et al., 2022). Mental health professionals must possess a "higher level of understanding of the complexities involved in solving human problems" (Cottone et al., p. 18). Specialty training and board certifications are voluntary for therapists to identify as qualified in a specific area but are not legal endorsements to practice for a fee (Cottone et al., 2022). Some mental health professionals

adhere to positions of ASD as a normative variant or a medical or mental disorder. Therapeutic approaches exercised from either position may reflect personal or professional dogma.

Scope of the Problem

Autism has been in our social landscape for centuries. The first documented case of autism was in 1747 in the court case of Hugh Blair of Borgue who had his marriage annulled by his brother due to his mental capacity. His court documents listed behavioral, emotional, and social deficits that accurately describe current-day criteria for an ASD diagnosis (Houston & Frith, 2000).

The early twentieth century brought rigorous research of autism into the annals of science. A Russian child psychiatrist, Dr. Grunya Sukhareva, studied childhood autism her entire career; opened a therapeutic school for children with psychiatric disorders; and published the first detailed research account of childhood autism in 1925 (Manouilenko & Bejerot, 2015; Simmonds, 2019; Wolff, 1996). Dr. Sukhareva expanded on the then current-day autism nomenclature with a research study of six child participants. Dr. Sukhareva's descriptive analysis reported on autistic characteristics, organic mental expressions, and physical impairments specific to the autistic child. Dr. Sukhareva noted an interesting feature distinct to her patient population: high intellect with diminished motor skills (Manouilenko & Bejerot, 2015; Simmonds, 2019; Wolff, 1996). In 1926, Dr. Sukhareva reported that autism (referred to then as schizoid disorder) was a neurological disorder with developmental deviations that originated from neuropathways in the "cerebellum, basal ganglia and frontal lobes" (Wolff, 1996, p. 119) that align with the modern-day definition of autism. Dr. Sukhareva's clinical description of childhood autistic traits and behaviors was precise and so well-articulated that 97 years later it nearly perfectly aligns with the current-day, diagnostic-criteria tool for mental disorders—the

DSM-5 (Manouilenko & Bejerot, 2015). Research in autism continues today, almost 100 years later. However, until the CDC (2023-f, April 4) began tracking autism diagnosis in the 1990s, there had been very limited studies of prevalence.

Autism has familial links that are highly heritable (Frans et al., 2013; Sandin et al., 2014; Gaugler et al., 2014; Hallmayer et al., 2011; Taylor et al., 2021). Current research in gene expression has identified high heritability of autism, as well as de novo genetic mutations (new mutations that do not originate from a familial gene line, rather spontaneously occurring in the egg or sperm). ASD is part of a mixed group of disorders with heritable phenotype changes that shared mitochondrial impairment (Balachandar et al., 2021; Moos et al, 2016; Rossignol & Frye, 2012) and gene-variant mutations linked to autism with familial links to the father (Brandler et al, 2018; Shen et al., 2020). The CDC reports a gender ratio of 3.77 males to 1 female diagnosed with ASD (Maenner et al., 2023). Gender ratio is a complex issue with multiple differential arguments. Interestingly, the literature currently challenges gender ratio with robust debate: Studies from a systematic review and meta-analysis found the ratio to be closer to 3 males to 1 female (Hull et al., 2017; Loomes et al., 2017), and Hull et al. (2020) argued a 2:1 ratio. Other studies found increased mutation burden in autistic females suggesting the 4:1 gender-bias ratio may be accurate due to a "female protective effect" (Zhang et al., 2020). There is a consensus growing among qualitative clinicians that an estimated 50% of females with autism were not being diagnosed because they had mastered the art of "masking" their symptoms (Attwood, 2015; Hull et al., 2019; Hull et al., 2020).

The lifetime cost of autism per individual with autism has been estimated to range between \$1.4 million to \$2.4 million depending on subsidies needed for intellectual ability (Buescher et al., 2014). There are ample support groups, websites, and public-service education

campaigns focused on autism awareness; the same deference has not been given to neurodiverse relationships. As different neurologies increasingly intermingle, public education, respecting the similarities and differences of NT/ASD couples, and support resources with healthcare professions proficient in autism and typical neurology synergy are vital.

Significance

Challenges within a neurodiverse relationship likely arise due to their mixed neurologies. Each partner understands the world differently, which may affect the assimilation of information received during verbal or nonverbal interactions (Bolling, 2015; Lorant, 2011; Millar-Powell, 2015; Wiklund, 2016). Socio-emotional deficits may affect relational intimacy at some point in the relationship (Attwood, 2015; Bolling, 2015; Davilla et al., 2017; Lau & Peterson, 2011; Millar-Powell, 2015) from the lack of understanding nuances that may not be discernable to a partner with autism (Urbano et al., 2012).

Adults with autism struggle with social interaction skills. Complex neurophysiological, neuroanatomical, or neurochemical mechanisms underlie social, cognitive, and behavioral skills (Westby & Robinson, 2014). These complex mechanisms are conceptualized by: theory of mind (ToM) which is a socio-cognitive concept concerned with understanding the perspectives of others as well as one's own (Baron-Cohen, 2001; Brewer et al., 2017; Pedreño et al., 2017); central coherence theory, which is the ability to understand context or "see-the-big-picture" (Frith & Happé, 1994); and executive function which is a higher-order, socio-cognitive ability that enables an individual to plan, problem-solve, and organize (Stuss, 2011).

Adults with autism who struggle with social, emotional, and behavioral impairments are likely to strain relational equilibrium to the point that their NT partner feels relational disconnection (Bolling, 2015; Deguchi & Asakura, 2018; Lewis, 2017; Millar-Powell, 2015;

Rench, 2014). Predictors of happiness and contentment in relationships have included reciprocal emotional behavior, emotional support, and intentional supportive actions (Davilla et al., 2017; Morelli et al., 2015) from each partner. Some research showed partners who had difficulty with socio-emotional reciprocity did not intuitively express sentiment and the NT partner was at risk for poor self-image and depression from chronic affection evasion (Attwood, 2015; Bostock-Ling, 2017). The NT partner saw a different side of their partner than the partner with autism showed to the rest of the world. Hull et al. (2017) conducted a study to explore how adults with autism attempt to cope socially and found that the adult with autism can be a master of camouflage. The partner with autism can be an "actor" to show an image of themselves that the NT partner may not have been aware was not real (Hull et al., 2017). The authors noted these adults with autism changed behavior when others were watching; deflected attention away from themselves to keep others from noticing their issues; and showed what they wanted you to see, or acted "socially interactively" with others to align their deportment with group expectations. This could be disconcerting for the NT partner as they were unsure what was authentic.

As previously mentioned, ASD is a life-long disorder. The chronicity of poor socioemotional reciprocity; difficulty with nonverbal communication and social interaction; and
problems with maintaining and understanding relationships (CDC, 2022-e, Nov 2) take a toll on
the NT partner. It is an insidious process of losing one's identity that brings the NT partner to
feel depressed, neglected, emotionally and socially isolated, alone, lonely in their relationship,
and emotionally exhausted with deteriorated physical and mental health (Attwood, 2015;
Bolling, 2015; Bostock-Ling, 2017; Millar-Powell, 2015; Rench, 2014). Severson (2019) argued
that NT partners take on the role of "survival, acceptance and adaptation" (p. ii) and if the
partner with autism is willing to help maintain this structure, then a satisfying relationship is

possible. The autistic partner may be content in a relationship with a partner who has no social, emotional, communicative, or interaction deficits, yet this is a paradoxical contrast to the lasting impact the partner with autism leaves on the NT person in the relationship (Attwood, 2015; Bolling, 2015; Millar-Powell, 2015; Pommerenk, 2017; Rench, 2014).

Nursing is the largest healthcare profession in United States with nearly 4 million nurses on the frontline of healthcare (American Association of Colleges of Nursing, n.d.). Nursing has a massive workforce to identify and engage adults with autism and their neurodiverse relationships at every juncture of the healthcare system. Nurses, nurse practitioners, and mental health professionals are a large and efficient force to skillfully identify undiagnosed or misdiagnosed patients with autism and recognize NT partners who may need support before they reach a point of crisis. Nursing is effectively positioned to accomplish a critical paradigm shift for the identification, care, communication, and treatment of patients with ASD and the significant people in their lives. A nursing workforce that is educated to identify individuals with neurodevelopmental disorders and the residual effects these disorders have on their partners is pivotal to significantly affect outcomes in patient care, healthcare costs, and support programs for adults with autism and their NT partners.

Gap

Mental health nurse practitioners and other mental health professionals are needed who understand the *culture of autism* (Attwood & Pike, 2019) to help each understand the "language" of the other. Understanding the culture of autism means to understand the world of the individual with autism. Attwood and Pike explained that mental health professionals need to understand the adult with autism's perspective and point of view that includes concrete thinking and their inability to understand or convey emotions. There is a deficit of professionals with explicit

knowledge of neurodiverse dynamics. A professional who is neurodiverse literate is less likely to employ emotion-focused techniques that are commonly used in neurotypical couples counseling. Mental health professionals who do not have a comprehensive understanding of the vastly different biopsychosocial components of each person's distinct neurology may leave one or both partners feeling accused and dismissed (Millar-Powell, 2015). It is important the individuals in a neurodiverse couple learn to *hear* what the other is communicating and mitigate problems related to limited emotional understanding and expression.

There is a paucity of data on neurodiverse relationships in the literature. There is limited information on how different neurologies affect the other partner. Research is needed to explore problems within neurodiverse relationships, how these problems affect each neurologically unique partner, and what therapy the mental health professional provides to the neurodiverse couples who seek help.

Purpose

This study explored the social process(es) mental health professionals use to provide effective therapy to neurodiverse couples. The long-term objective was to construct theory to develop guidelines that provide effective therapy to neurodiverse couples. The long-term goal has broader implications to reach a wider audience in the form of effective range of communication between the healthcare professional, the adult with autism, and their NT partner within healthcare settings.

Research Questions and Aims

This study examined the research question: How did mental health professionals counsel neurodiverse couples in therapy? More precisely, what social process(es) did the mental health professional use to generate, develop, and provide therapy to neurodiverse couples? The aims of

this study included: (a) to investigate and explain the social processes used by therapists with neurodiverse couples; (b) to explore and identify factors used by therapists that assist or hinder counseling with these couples; and (c) to develop a core category as a beginning substantive theory regarding how therapists counseled neurodiverse couples. The goal of this study was to have a theoretical framework that led to evidence-based guidelines for psychiatric mental health nurse practitioners and other mental health professionals who work with neurodiverse couples.

Method

This study employed Charmaz's (2014) constructivist grounded theory methodology. There is a need to examine the social processes behind the development of therapy for couples who have very distinct neurological needs and abilities. There are non-scholarly testimonials, support groups, and books written in the first person about the many aspects of NT experiences in relationships with adults with autism (Families of Adults Affected by Asperger's syndrome, n.d.; Asperger/Autism Network, 2020; Moreno et al., 2011; Pike & Attwood, 2019), but research literature showing evidence on counseling this specialized group, nor how to give them direction on how to cope, has not been found. Herein lies the problem. According to the largest professional group representing counselors—the American Counseling Association (ACA) code of ethics (C.2.b; 2014)—counselors counseling in a new specialty area need to have relevant training, education, and supervision to practice competently. The National Board for Certified Counselors (NBCC) code of ethics states "counselors shall perform only those professional services for which they are qualified by training, education, and supervised experience" (NBCC, 2023). Counseling neurodiverse relationships is considered a new specialty area, yet there are no formal or accredited sources of training programs for adults with autism or neurodiverse

relationships. The CDC has continuing education modules of autism training for health professionals to improve early identification of infants with autism (CDC, 2023-h, June 1). Training programs for neurodevelopmental disabilities are available at UC Davis Health for healthcare professionals to learn to conduct research on autism and care for the individuals (Mind Institute, n.d.). Bennett et al., (2012) presented a paper at an ACA conference that outlined what counselors should know about ASD; however, no training or guidelines for therapists who counsel neurodiverse relationships was discussed.

Conclusion

The growth in numbers of adults with autism is a "top national priority" (U.S. Department of Health and Human Services, 2021, September, p. 1). Each year more individuals with autism enter adulthood to merge with the millions of adults with autism already living in society. The magnitude of 1 in 6 children diagnosed with a developmental disorder; the prevalence of autism being 1 in 36; and projection models predicting 1 in 45 adults with autism may not be aware they are on the spectrum, significantly increases the odds of neurotypical individuals entering into a mixed-neurology relationship (CDC, 2023-j, July 13). The characteristic deficits brought into a neurodiverse relationship may be initially and intentionally hidden from the NT partner.

Multiple years of research have focused on prevalence of autism at birth, investigating pathology, genesis, diagnostic screening, intellectual, developmental, and behavioral disorders associated with autism (CDC, 2022-d, April 29). The literature suggests altered neuronal connectivity plays a role in ASD. There is encouraging early evidence that indicates specific rehabilitative therapy with children affected brain changes or plasticity to mitigate and, in some

cases, improve core deficits of autism (Calderoni et al., 2016; Vakorin et al., 2016; Zimmerman & Gordon, 2000). Research on behavior and the neuroplasticity of a child's brain did not include research on relationships.

Some studies indicated how computer-based training affected neuroplasticity in the adult brain (Bölte et al., 2015). The research discussed here explored social processes used by the therapist for a neurodiverse couple. An intimate relationship where one partner (autistic) had core deficits of communication and was unable to reciprocate social, psychological, and emotional behavior; and the other (neurotypical) partner was deprived of social, emotional, and psychological intimacy in their relationship, could not thrive with this affective imbalance and the couple sought therapy. With limited research found in the literature on neurodiverse relationships, this study looked at how therapy was developed. What was the process used to develop therapy for these couples? What was the therapist trying to accomplish? Essentially, what was the point of therapy for the neurodiverse relationship? Where will therapy lead? Was the therapist a facilitator of change or were they supporting the relationship goal? Could a person with a life-long neurodevelopmental disorder change to accommodate the emotional and psychological needs of their neurotypical partner? What should be communicated to each neurologically distinct person and how would this be done? What communication tools did the therapist use when one partner lacked socio-communicative and socio-emotional skills?

Understanding how to provide therapy in these relationships to help the couple thrive is paramount. No training programs for neurodiverse relationship therapy training can be found in the literature. How mental health nurse practitioners and other mental health professionals provide therapy to these diverse couples while maintaining the integrity and dignity of each neurologically distinct person is vital.

A constructivist grounded theory approach for this study uncovers patterns and factors related to the social process of providing therapy for a neurodiverse relationship and allows us to construct a substantive theory. This study is ripe for the rapidly growing numbers of neurodiverse couples who seek help to achieve functional, happy relationships. From this study, the mental health professional who understands the tangible and intangible language of each neurology offers insight or guidance to help improve their quality of life. By understanding the process mental health nurse practitioners and other mental health professionals use to approach the multidimensionality of the specialized couples they counsel, this insight can be further implemented in other settings where mixed neurology patients and healthcare professionals coexist.

CHAPTER TWO: LITERATURE REVIEW

This literature review details two types of concepts: definitive and sensitizing. These concepts are an important part of qualitative research. Definitive concepts provide a framework to the research by offering a context for breadth and meaning. For example, in this literature review, definitive concepts detail the autistic brain. Understanding some aspects of autistic neurodevelopment will give context and meaning to communication and behavioral impairments that are fundamental to the structure of this research. Definitive concepts offer "a priori specification of what is common" in a general sense (Hertzum, 2018, p. 179). Sensitizing concepts are more abstract and suggest a "general sense of reference and guidance" (Hertzum, 2018, p. 179). Chapter 2 details sensitizing concepts that have relational significance to the core deficit contexts of autism. Sensitizing concepts give depth but are not *definitive* in their purpose. Sensitizing concepts function as an arbiter between theory and practice (Hertzum, 2018).

Constructivist grounded theory (CGT) approach has an underlying pragmatist epistemology of relativism and subjectivity for theory construction. In CGT concepts, categories and theory are constructed from the data. Theory construction or truth is relative to the subjective perceptions and world view of the researcher and participants involved in the study (Bryant & Charmaz, 2019; Charmaz, 2014; Hewitt, 1984). In this study, the researcher used CGT methodology to analyze interviews that led to the construction of theory that emerged from the data. Theory construction appropriates definitive and sensitizing concepts to guide inquiry (Charmaz, 2014). Definitive concepts in CGT provide a priori insight and represent a commonality within a class that uses precise descriptors with unambiguous application, measurement, and characteristics (Blumer, 1954; Hertzum, 2018). Sensitizing concepts are abstract, unprecise, nonspecific characteristics of a class that are "open-ended and suggestive"

(Hertzum, 2018, p 180) while being heuristic in nature, lacking in empirical content, and not being easily operationalized (Charmaz, 2019). It was through these vague characteristics that the researcher drew from their life experiences and personal global knowledge to decipher purposeful events. It would be impossible to describe an objective reality when the researcher could not detach from "their own lenses and conceptual networks" to observe reality outside themselves (Kelle, 2005, p. 3). Charmaz's perspective of symbolic interactionism in grounded theory is symbiotically entwined with the pragmatist notion that our actions are based on what we think we know about the world (Charmaz, 2014; Hewitt, 1984). Knowledge is not organic; rather it is understood through shared interpretation. It is this vantage point that governs this study. It is impossible for humans to disconnect from their implicit subjective context to extract data or theories with complete detached objectivity. Charmaz acknowledged that theory provides an interpretation of the world that constructs our reality. CGT provides the optimal approach to understand the world as experienced by the neurodiverse couple and provides a method to build theory that interprets this reality.

The purpose of this study was to explore the social process(es) mental health nurse practitioners and other mental health professionals use to provide therapy within a neurodiverse relationship. The long-term goal was to construct theory that could be used to develop guidelines for future therapy for neurodiverse couples. This study aimed to uncover the social process(es) used to develop therapy and identify techniques for each neurologically distinct partner. It explored barriers of therapy for each partner, and barriers experienced by the mental health professional. The outcome of this study could potentially affect patient care beyond the therapist's office and extend to all healthcare professionals, adults with autism, and the NT partner in healthcare settings, schools, nursing homes, government agencies, or any public arena.

Adults with autism in a relationship with a partner who is not on the spectrum (is NT) may be at odds with the differences with their communication styles, social interaction abilities and behavioral needs. A diagnosis of autism is based on criteria as defined by the WHO's International Classification of Diseases (WHO ICD-11; 2019), or the DSM-5, edited by the American Psychiatric Association (2013). Currently, a diagnosis of autism does not include biomarker metrics; rather it is based on confirmed symptoms from each grouping of social and non-social core criteria. The social criterion requires identification of behavioral symptoms of significant impairment in social communication and interaction. The non-social criterion requires significant impairment in areas of restrictive or repetitive behavior (American Psychiatric Association, 2013).

ASD is often accompanied by co-occurring medical, neurological, psychological, or mental illness conditions (Medical Comorbidities, 2013; Pratt & Hall, 2018). Neither ICD-11 nor DSM-5 make a distinction between autism as a primary diagnosis (idiopathic autism), or as a secondary diagnosis (syndromic autism) to a genetic disorder such as fragile X syndrome or Rett syndrome (Pratt & Hall, 2018). Balancing the disparity between communication and social interaction needs and abilities of the adult with autism and their NT partner in a relationship is a challenge for the mental health professional. Adults with autism and their NT partners understand and interact with the world in very distinct ways.

It is currently unclear which, if any, theoretical principles, or underpinnings mental health professionals use to guide their practice when counseling neurodiverse couples. Every relationship has challenges; however, the synergy within a neurodiverse relationship dynamic has special, and mostly unrecognized, challenges unique to the couple. These unrecognized challenges include continual distress from a disequilibrium of emotional intelligence and distinct

thought processing that are compounded by psychosocial dynamics, character traits, behavioral issues, and very narrowed or fixated interests by one (or both) partner(s). These socio-emotional and behavioral features amplify the intensity of burden within the relationship where neither person identifies the problem, nor understands how to fix it (Aston, 2009; Brady et al., Thorne, 2014; Pike & Attwood, 2019).

The mental health professional who fully understands the *culture of autism* engages and communicates with the adult who has autism (Pike & Attwood, 2019) without undermining the emotive needs of the NT partner. Understanding the culture of autism involves appreciating the nuanced world of the individual with autism. Mental health nurse practitioners and other mental health professionals need to value the perspective and point of view of the adult with autism. For the adult with autism, this includes concrete thinking and difficulty or a complete inability to understand or convey emotions. It is unclear how the biological structure of the brain translates to clinical presentation of behavioral symptomatology. It is important to gain insight from other relationship dyads as a reference parameter for disparities in relationships. Identifying the gaps is important. This literature review explores concepts—both definitive and sensitizing—for novel exploration into conceptualization of autism, neurodiverse relationships, and counseling practices to inform the grounded theory process for analysis and theory construction. (Blumer, 1954).

Definitive Concepts

Autism as a Top National Priority

If autism were a disease, it would be classified as a pandemic; but it is not a disease.

Autism is a ubiquitous neurological and developmental disorder that is found in every developed

country in the world (Autism Europe, n.d.; Autism rates, 2020; Charron, 2017; Elsabbagh et al, 2012; Munir et al, 2016; WHO, 2023). Autism is everywhere; every geographical region, every socioeconomic domain, every demographic; autism is everywhere. The past two decades have seen a world-wide increase in the identification and study of individuals who are on the spectrum (ASD; Lyall et al., 2017). To understand the relevance of ASD in healthcare, it is necessary to understand the prevalence.

In 2010, the WHO estimated that globally, 1 in 160, or 7.6 million, children were born with ASD. Today, this number has increased. The WHO estimates 1 in 100 children are diagnosed globally (WHO, 2023). It is difficult to get a true estimate of the number of people in the world who may be living with autism. The quality of epidemiological studies in lowerincome countries may be questioned; many countries do not subscribe to the diagnostic criteria as established by ICD-11 or DSM-5; or some countries (developing nations) may not have the logistic or healthcare resources to support diagnosis of individuals with autism. The global prevalence studies found in the literature are systematic reviews of epidemiological surveys that reflect similar outcomes. Li et al., (2022) did a bibliometric analysis of risk factors for autism in 204 countries. They estimated a worldwide prevalence burden of 28.3 million cases of autism but cautioned that accuracy is dependent on the quality of the data. Other systematic reviews reported similar outcomes: global prevalence of autism has been consistently rising over the past 20 years (Solmi et al., 2022; Zeidan et al., 2022). Documented cases of autism have increased nearly 800% over the past 20 years in the United Kingdom (Russell et al., 2021). The risk of autism was seven times higher in Norwegian children born to immigrant mothers (Eig et al., 2023). Autism rates in Japan increased from 2009 to 2019, reflecting more than 3% of children are currently born with autism (Sasayama et al., 2021; Sasayama et al., 2021). Some cities in the

United States saw a 500% increase in the rate of diagnosis in the time between 2000 and 2016 (Shenouda et al., 2023). A regional, stratified, multiphase, random-sample case study looked at the prevalence of adults with autism and suggested there may be a compelling number of uncounted adults who may be undiagnosed, misdiagnosed, or unaware they have autism and are hiding in plain sight (Brugha, 2011). ASD has significantly increased in prevalence from 1995 to the most recent CDC tracking estimate in 2021. The United Nations (UN) has recognized ASD is likely underdiagnosed globally (Gary & Rubin, 2015).

There is much disparity with gaps for resource accessibility (U.S. Dept. Health & Human, 2018) while prevalence rates rise (CDC, 2023-f, April 4). Millions of children diagnosed with ASD grow up to become adults with autism. Autism is a substantial healthcare and economic burden on society. This burden, compounded by increasing numbers of adults with diagnosed and undiagnosed ASD, is essential for the mental health professional to acknowledge.

Autism is a rapidly emerging health issue. Tens of millions of individuals, couples, and families need logistical, educational, emotional, and financial support from direct and indirect costs related to autism during their lifetime. Cakir et al. (2020), estimated the lifetime social cost for an individual with autism to be approximately \$3.6 million, without intellectual disability (in 2019 USD). Studies suggested an estimated 30% of individuals with autism have a co-occurring intellectual disability (Shenouda et al., 2023). An individual with autism and a co-occurring intellectual disability would increase the estimated social cost to \$4.4 million in 2019 USD (Cakir et al., 2020). A deeper dive into tangible and intangible costs reflected that estimated cumulative costs for the United States to support individuals on the spectrum could range from \$7 trillion to \$15 trillion by 2029 (Cakir et al., 2020). This fiscal estimate did not consider older adults on the spectrum who were born before tracking began in the 1990s. Unemployment or

underemployment for adults with autism ranges from 50% (Jacobs, 2015), to as high as 80% (UN 2015). Autistic people have deficits of varying levels of severity (Autism Task Force, 2016) and may require minimal to robust degrees of educational, medical, emotional, social, lifestyle, and economic support. The degree, severity, and presentation of behavioral or significant social deficits are unique to each autistic individual. It is this variability that makes communication, patient education, and challenges within the neurodiverse relationship complicated for the mental health professionals who provide therapy to these couples within the healthcare setting or private office.

Neuroanatomical Biomarkers

Autism is not a single condition, rather a range of disorders with a spectrum of etiologies (Chung, 2014; Gyawali & Patra, 2019). Since the Combating Autism Act of 2006, the United States has invested tens of billions of dollars in autism research, education, and support from federal and private funding sources (Combating Autism Act, 2006; Interagency Autism Coordinating Committee, 2019-a, 2016-a). Trends in research funding are weighted toward finding a cause(s) through exploring biomarkers within the autistic brain. Studies include neuropathophysiological and molecular pathway mechanisms and neuroimaging abnormalities (Catani et al., 2016; Cheng et al., 2016; Ecker et al., 2012; Fernándex et al., 2018; Maximo et al., 2014; Gyawali & Patra, 2019; Nakagawa et al., 2019). The literature is rife with genetic studies exploring lineages of heritability, as well as genetic risk factors associated with the age of the father at conception (Chung, 2014; Vorstman et al., 2017). Research is also currently exploring in utero exposure to certain pharmaceutical or environmental agents (Chung, 2014; Interagency Autism Coordinating Committee, 2016-b), gene expression or mutations (Contreras & Hippenmeyer, 2019; Nakagawa et al., 2019; Parikshak et al., 2015); and genomic sequencing and

environmental influences (Chung, 2014; Interagency Autism Coordinating Committee, 2016-b) and epigenetic markers potentially linked to neurodevelopmental disorders (Esraghi et al., 2018).

The atypical neurological development within the brain of an individual with autism consequentially involves white-matter connectivity, grey-matter connectivity, cortical connectivity, brain volume, and amygdala abnormalities (Cheng et al., 2016; Maximo et al., 2014; Pua et al., 2017) that affect various regions of the brain (Catani et al., 2016; Ecker et al., 2012; Frye et al., 2019; Zimmerman & Gordon, 2000). Some studies suggested individual temporal variability of connectivity over time rather than a dysfunction of underconnectivity in ASD (Falahpour et al., 2017; Pua et al., 2017). This is an important supposition to consider when determining the biological genesis of social behavior and social cognition associated with autism for mental health professionals who provide therapy to people with autism. However, there remains no definitive correlation with specific areas of the brain and ASD symptoms.

Nonetheless, when looking at the entire brain function and anomalies in structural development, associations can be made.

Contreras and Hippenmeyer (2019) and Nakagawa et al. (2019) found that gene expression of an adapter protein, *Memo1*, was associated with disrupting the radial glial cell matrix in the early structural development of the cerebral cortex of brain development in utero. These researchers identified that neurogenesis and migration of defective radial glial cells mediated by *Memo1* mutation has been linked to people with ASD. Poor cortical connectivity that affects different regions of the brain may explain behavioral expressions in individuals with autism (Cheng, et al., 2016; Ecker et al., 2012; Maximo et al., 2014).

Genetic Biomarkers

Genetic involvement in ASD has revealed single gene associations to autism with some individuals and multiple gene associations with the developmental process that determines risk for others (Chung, 2014). ASD is highly heritable and can originate from de novo genetic mutations. These are genetic mutations that have not been passed down by either parent but come from a mutation in the egg or sperm cell at the time of conception. Rare gene variants that are heritable or de novo are responsible for a causal association in as high as 30% of people with autism (Vorstman et al., 2017). Individuals with autism have an extensive matrix of genetic biomarkers with thousands of genetic loci that contribute to risk (Gratten et al., 2014; Parikshak et al., 2015). A national database that houses a repository for Autism Research is available to share data and as a collaborative site for scientists, laboratories, and other platforms (National Database for Autism Research, 2023).

Summary

Exploring the complex nature of neuroscience by dissecting the neurobiology of autistic brain development provides insight into the clinical manifestations of social, communication, and behavioral impairments, such as fixating or repetitive behaviors that create a unique set of problems not found in other individuals. This anomalous neurology is suspected to interfere with the individual's ability to communicate or socially interact. There are a range of biological etiologies associated with autism. The relevance of neurobiology and genome research in autism augments knowledge of biology that contextualizes behavioral deficits associated with ASD.

ASD is not a mental illness, rather it is a developmental disorder that may have cooccurring psychiatric illnesses. What sets therapy for individuals with autism apart from others is the neurobiology that is the genesis of their behavioral or communication problems. The study of the circuitry of the neurobiology of social behavior is useful for the mental health professional to follow how pathways and genetic expressions translate into behavior, and then to mitigate this behavior with therapy. The specificity of the neuroanatomy presents a range of global and person-specific social-interaction challenges that affect relationships with intimate partners, social relationships, and relationships with health professionals who must communicate or provide therapy to the person with autism and their neurodiverse partner. De novo gene mutations broaden the challenge of managing variant clinical manifestations. Continuing genetic and epigenetic studies will further delineate the overlap of autism and autism-like disorders for mental health professionals to counsel their patients.

The more biological information uncovered by science, the more value this knowledge has as a tangible tool that can be leveraged for mental health professionals to effectively mitigate therapy for the neurodiverse couple. Understanding the neurological make-up of the individual with autism can be invaluable for the mental health professional as they help the couple reach a mutually placating outcome while satisfying the needs of both parties.

Sensitizing Concepts

For it is 'in him' and not between him and the world that experience rises.

-Martin Buber, 1958

The obscure and pervasive nature of the mechanisms underlying the cognitive, social, and behavioral presentation of ASD are complex. Investigation requires observation with an openended focal posture for inquiry. Relational concepts in ASD research provide a broad reflective theoretical framework that offers context into the world of the person with autism (Kelley, 2011). Blumer described sensitizing concepts as "directions along which to look" (Blumer, 1959, p. 7).

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These contextual concepts are significant to ASD, that is, they have an association with the *core deficits* in autism. Core deficits are persistent deficits described in the DSM-5 diagnostic criteria for ASD. These include deficits in socio-emotional reciprocity, deficits in social communication or interaction, and deficits in maintaining relationships (CDC, 2022-e, November 2). Core deficits are characterized by three primary principles: *universality*, *specificity*, and *uniqueness* (Sigman et al., 2004). The core deficits must *universally* present in all autistic people throughout their lives, or at minimum, some juncture during their development. *Specificity* of the deficit must be demonstrated in the person affected by the deficit. Individuals will reflect areas of strength and weakness in each area of deficit. Finally, the core deficit must be *unique* to autism (Sigman et al., 2004). For example, communication and language deficits are considered unique to autism (Sigman et al., 2004).

Theories that postulated core deficits include: theory of mind (Baron-Cohen, 1997; Baron-Cohen & Swettenham, 1997), weak central coherence theory (Happé, 1999; Happé & Frith, 2006; Jolliffe & Baron-Cohen, 1999; Baron-Cohen & Swettenham, 1997), and executive function (Baron-Cohen & Swettenham, 1997; Hughes & Russell, 1993; Hughes et al., 1994). These sensitizing concepts are contextualized functions located in the frontal lobe, primarily the pre-frontal cortex, that, to varying degrees, affect control and organization of cognition; executive processes; and behavior. Camouflaging is another sensitizing concept that is outlined.

Theory of Mind

One demarcated distinction that separates humans from others in the animal kingdom is the ability to make assumptions. The ability for thought and emotion is clearly a human trait. To delve deeper into the mind, a subtle variant emerges that differentiates the autistic mind from others who do not struggle with social communication problems. Theory of mind, also known as

mindblindness (Baron-Cohen, 1997), is a construct within our mental abstract that infers, understands, feels, predicts, intends, interprets, or supposes within ourselves (intrapersonal) and with others (interpersonal). ToM deficits are not specific to, nor defined by, ASD; rather they underlie social-communication defects in the mire of many other conditions including, attention-deficit/hyperactivity disorder, Parkinson's disease, deafness, traumatic brain injury, behavioral disorders, dementia, psychiatric disorders, and language impairments (Westby & Robinson, 2014). The mind of an individual with autism has varying degrees of deficits of ToM (Kleinman et al., 2001); however, the commentary in research is discerning if these are true impairments, or are these processing biases that result from an inability to extract meaning from the context of a "bigger picture"—referred to as weak central coherence? (Happé & Frith, 2006; Jolliffe & Baron-Cohen, 1999; Passanisi & Di Nuovo, 2015). To understand how deficits of ToM affect the individual with autism, and by extension, impact the neurodiverse relationship, it is first important to appreciate the concept of ToM.

Theory of mind encompasses intangible dimensions of human essence such as emotion (affective ToM), thought (cognitive ToM), and being (inter- and intrapersonal ToM). It is how we understand and interpret the world around us and the people in that world. The most comprehensive means of explaining ToM is through illustrations. For example: I am reading in the library. I look up for a moment, catch the glance of a person a few tables away and they smile at me. I *interpret* their action as "they like me" or "what a pleasant person" or "they are happy." I have the capacity, ToM, to make any number of inferences about what I think or understand their state of mind or intention means. I cannot be sure; all I saw was a behavior, but I inferred their mental state from their actions.

The intricacy of intuitiveness and inferences involves levels of complexity associated with maturity and life experiences. If I am a 4-year-old child, I may *believe* the person is nice; if I am 65 years old, I may *infer* the person read something amusing in their book, was reminiscing, and reacted to my glance with a polite smile. Another instance of ToM: Someone walks into a room with red swollen eyes, dried tears, a smile on their face and mumbles, "everything is fine." I read-between-the-lines and *presume* everything is not fine, they are upset even though their words state something to the contrary. ToM is this capacity to attribute a state of mind to the other person. My intact ToM enables me to interpret the state of mind as: something has upset this person to the point of crying, but they do not want to burden me with their concern, so they present with a smile and comment that nothing is wrong. Individuals with ToM deficits may not pick up the nuanced information conveyed during the brief encounter. ToM is such an intricate and intimate part of our being that we are usually not conscious when we employ ToM when interacting with our world. For example, when you look at me, I can read your facial expression and tell the difference between a look of surprise and a yawn (Baron-Cohen, 1997).

The mind receives an infinite amount of data every moment we engage with people. We process this information to make sense of and to anticipate the wants, needs, or actions of other people (Malle, 2020) Watching a black-and-white, soundless Charlie Chaplin clip (Chaplin, 2016) engaged my ToM ability to comprehend the script, which made me laugh because I understood the meaning and nuances behind the actor's actions. Charlie Chaplin used roller skates to pass by a baby several times to steal licks of his ice cream cone, unbeknownst to the baby's father. This clip is funny when one understands the nuance underlying the idiom "stealing candy from a baby." A mother *knows* what is wrong with their infant when they hear their cries. The mother instinctively distinguishes between the "I-am-hungry" cry, the "I-am-hurt" cry, the

"I-am-tired" cry, and the "I'm-in-crisis" cry. Another example of ToM involves teaching a child how to ride a bike while simultaneously anticipating their anxiety; understanding the principles of physics and centrifugal force; pushing the bike while supporting the rider until you sense they have control; and then, at the right time, letting go. This example of ToM has mental interpretation and understanding of actions that thread a complex network of synergies of thought and movement. It also shows *intentionality*; the pursuit of an action to reach the goal of bike-riding mastery (Malle, 2020). This concept of intentionality is a significant factor for consideration within the parameters of the neurodiverse relationship.

Intentionality is one of the core elements of cognitive ToM (Baksh et al., 2020; Broekhof et al., 2015). It is the capability of comprehending intentions from the actions of others (Altschuler et al., 2018; Baksh, et al., 2020; Baron-Cohen, 2001). The partner with autism who has difficulty with social cognition and lacks relational social acting skills may find relationship harmony with their NT partner difficult (Murray et al., 2017; Spek et al., 2010; Yang & Baillargeon, 2013) as they are unable to cultivate and maintain a positive relationship. The sustainability of the neurodiverse relationship may be in jeopardy if the task to foster a healthy relationship, with minimal reciprocation, is left to one partner.

Empathy

Empathy plays an integral role in the formation of gratifying professional, relational, and social interactions. Empathy is a psychological capacity that characterizes the elemental nature of the human condition. Its tangible expression keeps people, communities, and societies together (Fuchsman, 2015; Baron-Cohen & Wheelwright, 2004).

Empathy is an arguably poorly understood, sophisticated, and complex process of mechanisms that process varying degrees of emotional acuity. There are two aspects to empathy

necessary for a viable connection with other human beings: recognition (cognitive component) and reaction (affective component). Baron-Cohen and Wheelwright (2004) described the cognitive component as recognizing emotional responses in the self and others. This involves identifying emotions in oneself, as well as understanding and anticipating the emotional state of the other person. Cognitive empathy enables an individual to "walk in someone's shoes" (Baron-Cohen & Wheelwright, 2001). This translates into feeling understood or heard when sharing feelings with another or, in a more socially global manner, traveling to a devastated geographical region to help innocent victims of an earthquake or tsunami. Self-awareness of our own emotions increases adeptness to identify the emotions of others (Goleman, 1995). The same authors described affective empathy as a parallel and appropriate emotional response to the emotional language of another. For example, a friend excitedly shares they were pregnant after trying for a period of time. An appropriate reaction (affective empathy) is genuine happiness for that friend.

There is much debate about the nature of empathy in autism (Nicolaidis et al., 2019). Early arguments presented empathy as a deficit in ASD (Baron-Cohen & Wheelwright, 2001); others argued there may be a misinterpretation of autistic behavior by NT counterparts (Faso et al., 2015; Fletcher-Watson & Bird, 2019; Sheppard et al., 2016). However, some have postulated there may be other co-occurring factors at play that affect empathy in ASD (Mul et al., 2018; Murray et al., 2005). Other positions have proposed there has not been enough research to determine an accurate level of interplay between empathy and ASD (Fletcher-Watson & Bird, 2019; Murray et al., 2005).

A diagnostic criterion for ASD is deficits in social interaction or socio-emotional reciprocity. Impairment in ToM interferes with social interactions and socio-emotional reciprocity when one finds it difficult or impossible to assimilate social expressions filled with

figurative symbols, implicit meanings, sarcasm, allegorical irony, or metaphors (Baron-Cohen, 1997, Baron-Cohen, 2001). For individuals without ToM deficits, it is exceptionally difficult to imagine what it could be like to not "intuitively" interpret another's emotive messaging. From the perspective of the individual who had ToM deficits, their interactions and interpretations of the world around them is blunted. Referring back to the example of the person who is smiling in the library, a person with ToM deficits would not intuitively infer causal reasoning for the other person's action (Baron-Cohen, 1997). They may see it as a mere muscle movement on the face without emotive possibilities (unlike the inferences from the individual with an intact ToM). The person with the red swollen eyes is "fine" because they said so; "everything is fine." The two facial expressions with open mouths (surprised and yawning) may not be distinguishable as separate emotions, rather just two faces with open mouths. The Charlie Chaplin clip may not elicit a humorous response watching the character steal licks of ice cream from the baby if they are not aware of the underlying nuances, or if the nuances are not understood. The meaning of the baby's cries may not be discernable to an individual who lacks ToM. Teaching the child to ride a bike may end with frustration due to difficulty or absence of understanding cues or an inability to anticipate, resolve, or calm the fears of the child after their first crash.

An intact ToM is something that many neurotypical individuals are not aware is part of their being. The neurotypical mind is unconcerned when someone tells a joke that entails spontaneous laughter because they interpret the underlying nuances and meanings that make the joke funny. They do not realize it is this ToM construct that informs them.

Whether there are degrees or differences of ToM continues to be conceptualized and deconstructed in the literature (Bio et al., 2018; Conway & Bird, 2018; Ronald et al., 2006; Slaughter & Repacholi, 2003). ToM is in play when the nurse quietly enters the room, with

pursed lips, says no words, but relays a gentle message with their eyes such as "grandma has passed." It is unfathomable to imagine how one could function without the acuteness of this vague and abstract ability that makes daily lives flow seamlessly. Tens of thousands of individuals with autism live with varying degrees of ToM deficits and are likely unaware any "ability" is missing. Difficulty with social communication or social reciprocity due to deficits in ToM adds another layer of complexity to the mental health professional who counsels the neurodiverse couple.

Weak Central Coherence Theory

The neuropathology of ASD continues to be probed; however, mounting evidence supports further investigation into atypical neural connectivity, specifically neural systems disorder, neuroinflammation, genetic heritability, and environmental factors (Courchesne & Pierce, 2005; Lai et al., 2014; Matta et al., 2019; Maximo et al., 2014; Sandin et al., 2017; Young et al., 2016). The person-specific degree of aberrant connectivity underlying the atypical development of the brain suggests a relationship with the scale of ASD symptomatology that may bias individual cognitive preference for information processing (Hahamy et al., 2015; Uddin, 2015; Vakorin et al., 2016). Vakorin et al. (2016) suggested that age-related and maturational changes in neurophysiology affect ASD brain function. It is unclear how hormonal, developmental, and age-related physiological changes affect ASD brain function over time (Uddin et al., 2013). Central coherence is a concept specific to autism that theorizes integration of information processing in ASD.

Every moment, whether we are aware or not, we gather and interpret information, draw connections, integrate data, and make sense of the world. The specificity of the information that is extracted and processed is the crux of central coherence. In other words, an individual must

have the ability to decide which pieces of information are relevant and which are not to get a sense of the scenario (Attwood, 2015). This overly simplified description of information processing is the gist of central coherence theory. Happé and Frith (2006) posited that a visual or linguistic information process captures general information which is then translated into meaning to contextualize our world view. For example, looking into a room filled with children sitting at a long table with balloons, cake on one table, and presents on another table. Central coherence enables a global picture to be seen by prioritizing certain information. The data captured gives meaning and context to the scene and suggests this is a birthday party.

Weak central coherence affects people with autism, but not all people with autism have weak central coherence. Weak central coherence is an inability to understand context due to fixation on detail (Cutler & Frith, 2003; Frith & Happé, 1994). As the person with autism collects and processes information, they fixate on certain details. Frith and Happé (1994) originally hypothesized that central coherence must be weak because the information processing focuses on specific details and does not capture a global view. In the example with the birthday party, the person with weak central coherence notices the picture on the wall or the pattern in the carpet but does not capture the more global details in the room, such as the actual birthday party. Frith and Happé suggested that the deficit in weak central coherence may be the inability to assimilate information at different levels of specificity since central coherence involves collecting universal data to provide a broad context. Attention to detail or detail-specific information processing may be an advantage for making connections or uncovering patterns that a global perspective may not realize.

Central coherence draws from two levels of information processing: information that provides meaning from a global context, and local processing or detail-focused processing

(Rozga et al., 2011). Depending on the quality of central coherence, Rozga et al. (2011) suggested that people with stronger central coherence extract global meaning but overlook details, while others with weak central coherence have great attention to detail and overlook the global context. Central coherence theory has evolved from its original hypothesis. Happé and Frith (2006) postulated that weak central coherence may not be a deficit at all, rather a bias toward detail-focused processing. People with autism process global information if requested to do so, which suggests that weak central coherence is a cognitive expression of information processing (Happé & Frith, 2006; Beaumont & Newcombe, 2006).

For example, a mom tells her son with autism to do the dishes. The son enters the kitchen and does not notice the plates scattered along the countertop, two glasses by the toaster, a knife and spoon beside the coffee maker, and breadcrumbs on the stove. The son looks in the kitchen sink, sees it is empty, and proudly yells back to his mom "kitchen's clean." When asked to go back and wash the dishes on the counter he realizes he hadn't noticed them. Since the son's cognitive style is detail focused, he only checked the sink; it was empty and he registered in his mind, "good, no dishes to do." He was not aware of his global environment. When given explicit instructions to look on the counters, his context broadened for that incident and that moment.

Executive Function Theory

Executive function (EF) is a neurocognitive construct that executes high-order mental agency. Executive functions are sophisticated and specialized systems that organize and control complex cognitive and behavioral operations. The prefrontal cortex of the frontal lobe contains the region of EF that is believed to govern high-level cognitive and behavioral frameworks (Eigsti, 2011; Henri-Bhargava et al., 2018; Stuss, 2011; Szczepanski & Knight, 2014; Tranel et al., 2003; Ozga et al., 2018). High-order cognitive systems generally affect thought flexibility,

inhibitory drivers, immediate or working memory, planning, and mental fluency (Eigsti, 2011) which correlates with "intellectual function, memory, speech and language, complex perception, orientation, attention, judgement, planning, and decision-making" (Tranel et al., 2003, p. 621).

These constructs translate into behaviors necessary for functioning in everyday life. For example, these constructs give us the ability to make decisions, plan and organize, reason, initiate, maintain and follow-through with tasks, control behavioral impulses, and have self-awareness, short-term or working memory, abstract thought, and flexibility with new or spontaneous situations, and adapt to new experiences (Attwood, 2015; Demetriou et al., 2018; Eigsti, 2011; Henri-Bhargava et al., 2018; Stuss, 2011). The neurodiverse relationship that consists of behaviors such as poor communication skills, limited self-awareness, or limited emotional intelligence affects relationship satisfaction and the overall quality of intimacy in the relationship (Attwood, 2015; Goleman, 1995; Pike & Atwood, 2019; Wollny et al., 2018).

High-order agency that is not functioning properly can negatively impact the life of the individual affected. Executive dysfunction is not part of the diagnostic criteria for ASD; however, EF processes are associated with the core deficits of autism. Executive function disorder may affect inhibition processes, which are the ability to pay attention to relevant stimuli while inhibiting non-relevant stimuli to attain a goal (Barnard et al., 2008; Eigsti, 2011). An impaired inhibitory process that is either response inhibitory—also known as behavioral inhibition, or attentional inhibitory—presents with varying degrees of poor impulse control such as blurting something out (Attwood, 2015; Tiego et al., 2018). Executive function disorder affects thought flexibility or *set-shifting*, which is the ability to adapt one's thought process when change occurs (Eigsti, 2011). This is characterized by rigid, myopic, maladaptive beliefs or limited perspectives or interests. Executive function disorder can cause poor memory, inability to

stay on task, emotional lability, and absentmindedness, creating a hectic environment for the neurodiverse couple and the person with autism needing oversight or step-by-step detailed instruction (Meltzer & Krishnan, 2007).

The prefrontal cortex supports EF unless it is damaged, diseased, injured or exposed to stress (which causes neural injury). Healthy executive functioning correlates with normal maturation of the brain (Barrasso-Catanzaro & Eslinger, 2016). This is especially important during brain growth and development in the first decade of a child's life (Barrasso-Catanzano & Eslinger, 2016). A developing brain that is exposed to chronic stress—such as bullying or a contentious parental divorce experience—triggers the release of stress hormones that damage neural activity, which adversely affects executive functioning (Barrasso-Catanzano & Eslinger, 2016). Brain health is crucial to maintaining EF integrity. Patients with traumatic brain injury to the frontal lobe develop chronic behavioral and cognitive deficits from loss of EF (Montenigro et al., 2016; Ozga et al., 2018; Szczepanski & Knight, 2014). Ozga et al. (2018) identified brain injury as a "major risk factor" (p. 617) in developing neurodegenerative diseases and elevated rates of abusing drugs or alcohol, depression, and anxiety. The literature is replete with predictive and correlation studies of EF disorder with multiple disorders including dementia, Parkinson's disease, increased mortality, and violence (Huey et al., 2009; Hancock et al., 2010; Johnson et al., 2007; Paulwoods & Tröster, 2003; Rajan et al., 2015; Vataja et al., 2003).

The imbalance within a neurodiverse relationship, caused by a partner with impaired EF who struggles with the "big picture" of the inter-relation deficits as well as possible long-term health issues of EF disorder, can make coping difficult for the NT partner (Attwood, 2015). The neurodiverse couple who chooses to explore beyond their relationship and dive deeper into the pervasiveness and implications of EF disorder is guided by the mental health professional who

addresses coping strategies appropriately suited for the neurological ability of each NT/ASD person.

Camouflaging

Most people are motivated by the universal need to be loved and accepted (Baumeister & Leary, 1995). Desire for social acceptance and lasting relationships are innate drives that date back to early human evolution (DeWall & Bushman, 2011). The humanistic psychologist, Abraham Maslow (1943), prioritized the human need for "love and belongingness" before the need to achieve self-esteem and the achievement of self-actualization. This is compelling for people with autism who have statistically significant lower measures of personal self-esteem than the general public (Attwood, 2015; Cooper et al., 2017). The motivation to belong and be accepted is a powerful force that drives specific behavior to achieve this need (Baumeister & Leary, 1995). People with autism are especially sensitive with the need to be socially accepted. The struggle with social and emotional reciprocity, deficits in social interaction skills, and the social stigma of diagnosis compounds the struggle for the person with autism to partake and maintain lasting healthy personal and social relationships.

The drive to "fit in" is so intense, some people with autism develop coping techniques that involve camouflaging. *Camouflage* is a term that describes self-taught strategic conduct for the purpose of *concealing* personal socio-emotional deficits to appear normal in social settings (Attwood, 2015; Hull et al., 2017; Lai et al., 2017). Individuals with autism use their cognitive acumen to create camouflage strategies to appear socially competent (Attwood, 2015; Lai et al., 2017). For example, a person with autism joins in laughter to a joke they did not understand, however, if they laugh with the others, no one will be any wiser. Additionally, they may avoid participation in learning situations by being the class clown to deflect or distract from being

exposed; or they may be quiet, polite, and demure in a social setting to avoid drawing attention to themselves. They mirror the social behavior of another or conduct their actions in a way they believe others expect to see. Essentially, camouflaging does not include organic gestures because they are borne from purely cognitive intentions, rather than from spontaneous or naturally intuitive expressions (Attwood, 2015; Lai et al., 2017; Tierney et al., 2016). A person with autism described the intentionality of their camouflaging actions:

I was always ashamed of who I was, so I never told the truth about anything that would embarrass me. If you asked me if I have trouble understanding others, I would have said no, even though the true answer was yes. If you had asked me if I avoided social contact, I would have said no, because I wouldn't want you to think I was weird. If you asked me if I lacked empathy, I would have been insulted, because everyone knows good people have empathy and bad people don't. I would have denied that I'm afraid of loud noises, that I have a narrow range of interests, and that I get upset by changes in routine. The only questions I would have answered yes to would have been the ones about having unusually long-term memory for events and facts; reading books for information; and being like a walking encyclopedia. That's because I liked those things about me. I thought they made me look smart. If I thought it was good, I would have said yes, and if I thought it was bad, I would have said no (LaSalle, 2003 in Attwood, 2015, pp. 60–61)

The scope of deliberate misrepresentation of difficulties using camouflaging strategy to gain social acceptance is disconcerting when the same strategy is employed to avoid or hide from being diagnosed.

Individuals with autism experience a high level of social anxiety as a direct consequence of their social and communication limitations or deficits and, reciprocally, they experience a high level of anxiety as a consequence of coping fatigue, fear of detection, and stress from the amount of focus and energy required for camouflaging efforts (Attwood, 2015; Bellini, 2004; Cooper et al., 2017; Hull et al., 2017; Lai et al., 2017; Spain et al., 2018; Tierney et al., 2015). There is a reciprocal relationship between the extent of camouflaging and symptoms of depression (Lai et al., 2017). A female with autism had effective adeptness in the art of camouflage that was so astute researchers speculated many females with autism have successfully avoided diagnosis (Attwood, 2015; Dean et al., 2017; Lai et al., 2017; Tierney et al., 2015). Attwood's (2017) clinical judgement suggested the current prevalence of diagnosis is not accurate and speculated about 50% of children with diagnostic criteria are not identified.

The burden on the mental health professionals who provide therapy to individuals with autism and neurodiverse couples is to recognize the veil of camouflage strategies concealing social impairments. Undetected camouflaging could undermine the severity of social, communication, and relationship impairments that affect the quality of life of the person with autism and their NT partner.

Neurodiverse Relationships

Understanding the dynamics within a neurodiverse relationship helps add context to why therapy is sought by these neurologically distinct individuals. The heart of a person with autism is no different than any other person. They want to belong, they want to feel loved, and they genuinely feel love for other people (Baumeister & Leary, 1995; Bolling, 2015; Sala et al., 2020; Strunz et al., 2017; Urbano et al., 2013). The problem is not the desire; rather it lies in the

struggle with expression. The degree of socio-emotional impairment limits non-verbal communication behaviors such as facial expressions or body gestures, and the lack of interest in others or restricted fixated interests affects the message of intimacy interpreted by their NT partner (American Psychological Association, 2013). In recent years, research has presented a growing number of scholarly studies exploring the qualitative contexts of neurodiverse relationships (Attwood, 2015; Bolling, 2015; Bostock-Ling, 2017; Deguchi & Asakura, 2018; Lorant, 2011; Millar-Powell, 2015; Rench, 2014; Strunz et al., 2017; Wilson et al., 2017). As well, ample non-scholarly anecdotal attestations from firsthand testimonials (Aston, 2003; Pike & Attwood, 2019); support groups (aane.org; different-togethor.co.uk); blogs and discussions (goodtherapy.org; jerobison.blogspot.com; opendoorstherapy.com; psychologytoday.com); and autism websites (aane.com; autismspectrumnews.org; faaas.org) offer overwhelming consensus that neurodiverse relationships are replete with struggles unique to the dynamic of psychosocial and socio-communicative imbalances from this disorder. The *struggle* trajectory rises exponentially when integral elements of basic relationship intuition are missing from the neurodiverse relationship.

Inherently, the nature of any relationship requires ongoing concerted effort to nurture and grow a personal and intimate liaison. If partners have similar neurology, a successful relationship still requires a conscious investment in energy, time, and intention. Similar neurology implies individuals who are generally congruent in their development, specifically reaching typical developmental markers at comparable points along their lifeline (Morgan, 2017). This parallels each person with a relative balance of intellectual, neurologic, social, emotional, ethical, and physical domains (Morgan, 2017). Healthy relationships comprise multiple factors that provide each partner with a feeling of well-being, respect, emotional and physical protection, empathy,

intimacy, support, feeling heard, constructive conflict resolution skills, mutual investment into shared moments, and a collaborative commitment to family development (Anderson, 2019; Moore et al., 2004). Davila et al. (2017) identified a functional, healthy relationship requires thoughtful awareness of the self and others, to support each other's hopes, dreams, and aspirations. The authors found reciprocity of awareness of needs (personal, emotional, and physical) and respect (boundaries) conveys love, value, and caring toward each other that flourish within the relationship. Finally, Davila et al. recognized the importance of "emotion regulation" as an intrinsic part of healthy relationships (p. 164). This involved compassion for the self and the partner, especially during times of relationship discord by keeping a level head and staying engaged to find resolutions and maintain a healthy and positive relationship synergy.

In contrast, Davila et al. (2017) identified a few factors that contribute toward the unhappiness of people in poorly functioning relationships that include unresolved differences without closure; a subtle or overt aura of disharmony; and a lack of partner unity, belonging, or support. The authors posited that ineffective communication skills from individuals who lack introspection cannot resolve conflict in a meaningful way. Couples in a neurodiverse relationship have incongruous interpersonal abilities that affect the infrastructure of their relationship. By definition, the partner with autism has difficulty with socio-emotional reciprocity, socio-communication interactions, inflexibility of mindset, limited interests, or rigid fixations accompanied by other underlying co-occurring disorder(s) (American Psychiatric Association, 2013). The NT partner may also have co-occurring disorders which could precipitate (or mitigate) further variances within the relationship. Every person with autism has their own unique distribution of deficits. These impairments are on a spectrum as they vary by person, age, symptomatology, intellectual ability, and intensity. No two individuals with ASD have identical

expressions of their disorder, and by extension, no two neurodiverse relationships are identical. However, research continues to uncover consistent overarching patterns and common themes within the personal and interpersonal dynamics of neurodiverse relationships (Bolling, 2015; Bostock-Ling, 2017; Millar-Powell, 2015; Pike & Attwood, 2019; Wilson et al., 2017).

It is usually the NT spouse who feels the burden of marital discord in the relationship. There is no cure for ASD. The treatments for ASD are used primarily for children as interventions to reduce symptoms or help with cognition or activities of daily life (CDC, 2022-b, March 9). There are statistically significant measures of distress in neurotypical relationships for both partners (Bolling, 2015). Disparities expressed by the NT partner that affect their wellbeing as well as the integrity of the intimacy within the neurodiverse relationship are presented in Table 1. The table outlines multiple areas of distress for the NT partner during the relationship with their partner with autism. The NT spouses expressed that being employed outside the home increased life satisfaction (Bostock-Ling, 2017); NT partners were individuals who had a high level of empathy (Bostock-Ling, 2017; Deguchi & Asakura, 2018;); they liked their independence (Sala et al., 2020); and social support would mitigate stress, health issues, and overall well-being (Bolling, 2015; Deguchi & Asakura, 2018; Bostock-Ling, 2017).

The adult with autism describes a preference for self-sufficiency rather than intimacy (Bolling, 2015). The adult with autism wants high levels of relationship satisfaction but is blunted if the NT partner is unhappy in the marriage (Bostock-Ling, 2017). The adult with autism desires to be in a relationship (Strunz et al., 2017), but they have poor emotive communication skills (Bolling, 2015). They need explicit and clear communication (Sala et al., 2020) and desire a partner who is intellectually compatible with shared similarities (that is, is also autistic or has social anxiety; Sala et al., 2020). Sala et al. (2020) also noted that individuals

with autism have wider expressions of sexuality and gender diversity; it would be a disservice to make assumptions about their heterosexuality and not offer support to explore their sexuality or identity. In circumstances of thriving neurodiverse relationships, these relationships found a level of success when the NT partner took on the burden of sacrifice by adapting to, transforming, and accommodating the deficits and shortcomings of their partner with autism (Severson, 2019).

Comparing Other Relationship Dyads

There are many relationships that experience distress in some form measured on continuums of duration, severity, medical, emotional, or financial pressures and any number of other factors that disrupt perceived harmony. There are multiple reasons attributed to the causes of relationship dyad distress and studies have offered insight into these phenomena, as well as identified gaps. Briefly looking into these other relationship populations may be helpful to expand upon meaning or provide deeper, intuitive awareness.

While these relationship dyads are not "concepts," these dyads furnish a global awareness of issues that capture relationship dynamics, enable appreciation of instruments used to qualify (or quantify) features within a relationship, and remind us of our shared human experience. In addition, once perspectives have been explored and gaps have been identified, these analogous relationships may facilitate further reflection into important parallels that may be similar to characteristics of a neurodiverse dyad. These relationship dyads provided a reference point for this study. They demonstrated a dynamic of relationships in distress and parallels partners use in attempts to mitigate their situation.

Table 1Factors Affecting the NT Partner Within a Neurodiverse Relationship

Factors	Studies
Loneliness	Bolling, 2015; Deguchi & Asakura, 2018; Lewis, 2017; Millar-Powell, 2015; Rench, 2014
Social exclusion	Deguchi & Asakura, 2018; Millar-Powell, 2015; Rench, 2014
Low marital satisfaction	Bolling, 2015; Bostock-Ling, 2017; Deguchi & Asakura, 2018; Millar-Powell, 2015; Rench, 2014
Low quality of life	Bostock-Ling, 2017; Deguchi & Asakura, 2018; Millar-Powell, 2015; Rench, 2014
Life-threatening crisis from chronic repeated stressors	Deguchi & Asakura, 2018; Rench, 2014
Diminished physical and mental health	Bostock-Ling, 2017; Lewis, 2017; Rench, 2014
Distress from poor emotive attention	Bolling, 2015; Millar-Powell, 2015; Rench, 2014; Urbano et al., 2013
Lack of connectedness	Bolling, 2015; Millar-Powell, 2015; Rench, 2014; Lewis, 2017
Care-giver burden	Bostock-Ling, 2017; Lewis, 2017; Millar-Powell, 2015; Rench, 2014
Increased feelings of depression	Bostock-Ling, 2017; Lewis, 2017; Millar- Powell, 2015; Rench, 2014
Dissatisfaction with sex	Bolling, 2015; Bostock-Ling, 2015; Rench, 2014
Feeling overwhelmed	Bostock-Ling, 2015; Millar-Powell, 2015

Partner Abuse Relationships

Partner abuse, or intimate partner violence (IPV) is defined as "a pattern of behaviors used by one partner to maintain power and control over another partner in an intimate relationship" (National Domestic Violence Hotline, n.d.-a). This "power and control" involves all forms of exploitation including physical abuse, emotional abuse, sexual abuse or coercion, reproductive coercion, financial abuse, digital abuse, and manipulation (National Domestic Violence Hotline, n.d.). Huecker and Smock (2019) found 1 in 3 women and 1 in 10 men (or 10 million people per year) suffer from abusive relationships, creating a national economic cost of \$12 billion annually; and 1 in 5 women have been raped (or attempted) while 1 in 14 men have been forced to penetrate someone (National Intimate Partner, 2015).

There are a prolific number of studies on partner-abuse relationships in the literature. Google Scholar search engine pulled up over 2 million results with keywords "intimate partner violence," "domestic violence," "relationship." An extensive global review of the literature illustrates some prevalent themes. IPV is a global problem (WHO, 2019-b). Gender symmetry in coercive controlling environments is heavily weighted toward women being victimized (Myhill, 2010). Partners' decision-making processes and reasons for staying or leaving are complex, multifaceted, and multilayered. Many similar themes were identified, however fewer studies incorporate the larger social and structural order that influences outcomes. Partners who leave or make attempts to leave, do so when they get to a point where they feel they can't take it anymore; support or resources enable them viable safe options; their injuries are becoming unbearable; or when they realize the threat or fear of death (Fanslow & Robinson, 2010; Velonis et al., 2017). Partners who stay in these relationships rely on rationalizations to make their situation tolerable or they are mentally, physically, or emotionally unable to leave; in essence,

they have become hostage to the situation. Examples include some who stay for the sake of the children; some who believe they have nowhere safe to go; a lack of resources or support; fear of retribution; or that they have few or no job skills to sustain themselves and their children should they leave (Childress, 2017; Rivas et al., 2013; Velonis et al., 2017). Coping strategies used by partners in distressed relationships teeter on efforts to subdue the stressor with efforts to manage the damage being done (Hayati et al., 2013; Matthews et al., 2017; Smith et al., 2010; Taherkhani et al., 2016).

Mental illness and psychological affects and pain on both partners in IPV relationships is associated directly with domestic violence and abuse. (Crawford et al., 2009; Ferrari et al., 2014; Lutwak, 2018; Spencer et al., 2019). While depression, anxiety, and PTSD are significantly correlated with the victimized partner in the IPV relationship, personality disorders are strongly correlated with the instigator of IPV (Spencer et al., 2019).

The vast amount of partner-abuse relationship studies is centered around qualitative studies using surveys, questionnaires, or interviews, to look at the experiences of individuals within the relationship, decision-making processes, mental health associations, and self-impact inquiries. The UN (2014) has guidelines for collecting statistics on violence against women, primarily for all countries to assess violence in a universal, thorough, consistent, and methodological manner. This is in concert with efforts to eradicate global violence against women. There are gaps identifying the underlying etiology of IPV, in-depth studies with a critical examination of gender symmetry on various levels, and in-depth research trying to understand the perpetrators of partner violence.

The National Domestic Violence Hotline stated that abuse is a learned behavior (National Domestic Violence Hotline, n. d.-b). Some descriptions of feelings and hopelessness given by

the intimate partner exposed to violence appear similar to, and even parallel, descriptions of feelings given by the NT partner. There may be incongruencies with motivation behind the actions of the partner with autism causing the duress their NT partner is expressing. The actions and behaviors of the partner with autism that predispose their NT partner to feel distress have a genesis different from the IPV spouse. The actions of the partner with autism are associated with core deficits fundamental to their diagnosis, rather than an underlying driver of "power and control" which is unlike the domestic violence partner. However, the receiving partner is not thriving and, by their own expression, is suffering with immeasurable pain due to the actions of their spouse, irrespective which (IPV or ASD) spouse was performing the action and irrespective of the reason.

Dementia and Caregiver Relationships

The caregiver–dementia relationship dyad offers a glimpse into the parallel world of neurodiverse relationships by examining the similar feelings of being trapped; poor coping strategies; and stress symptoms exhibited as social withdrawal, anger, anxiety, depression felt by the caregiver or NT partner, and the ambiguous nature of the partner with dementia or partner with ASD. The number of individuals with dementia doubles every 20 years due to the aging population (Cheng, 2017). There are currently over 5.8 million people living with Alzheimer's dementia in the United States (CDC, 2020-a, October 26), with an estimated 70% living at home cared for by a family member (Johns Hopkins, 2013). Caregivers provide over an estimated 18 billion hours of care per year (CDC, 2023-i, June 30). The initial diagnosis of dementia conjures strong emotional responses from the patient and the caregiver. Dementia is a terminal neurodegenerative disorder with no treatment or cure. The caregiver is faced with coming to terms with a new reality in their relationship. In the beginning, the caregiver has the confusing

task of reconciling a form of *ambiguous loss*; while they see their partner is physically with them, they are also psychologically drifting away (Myhreet al., 2017).

Initially, the caregiver's energy is geared toward helping their partner cope with this frightening and newly diagnosed condition. As the very slow, languid process of partner deterioration envelopes their lives and eventually upends their routine, the wellbeing of the caregiver depends on the effectiveness of their coping strategies. Dementia and caregiver dyads that adopt dyadic coping strategies by mutually supporting each other significantly affect stress and quality of life within the relationship and with each partner (Häusler et al., 2016). As the disease progresses, and if the partners are able to adapt dyadic coping, quality of life for the caregiver remains good. Dyadic coping involves three simultaneous components: a caregiver partner experiencing stress; acknowledgement of this stress by the opposing partner; and how the opposing partner reacts to the perceived stress of their caregiver spouse (Häusler et al., 2016). As long as this emotional connection remains somewhat intact, the well-being of the caregiver remains satisfactory (Häusler et al., 2016).

Dementia caregivers are already more stressed than other caregiver dyads (Cheng, 2017) due to their deep emotional involvement, which subjects them to a higher susceptibility to depression, anxiety, poorer health, stress, and lower quality of life (Perren et al., 2006). If the partner has frontotemporal dementia, the clinical manifestations present slightly differently with unsettling personality changes; lack of empathy or apathy; lack of inhibition; and aberrant verbal, physical, or sexual behavior (Cheng, 2017). These behaviors are unnerving for the caregiver; take them beyond their abilities to cope; and increase their feelings of burden, anxiety, and stress. Providing the caregiver with support and psychosocial interventions will help them develop problem-solving techniques such as finding "everyday search for meaning" through increased

coping skills by using memory aids, pleasant activities, education, social activities for contact or networking, and being in the present (Myhre et al., 2017). These techniques are an effective method for supporting the caregiver and fortifying their coping blueprint with social connection, education, and more useful coping strategies.

This dementia and caregiver relationship dyad shares some peripheral common ground with neurodiverse relationships. The presentation of dementia is slightly different depending on which region of the brain is affected. The clinical manifestations from variant dementia add to the already heavy caregiver burden. A relationship with a partner that is increasingly unable to provide social and emotional reciprocity or declining communicative connection becomes an enormous physical hardship and heartbreaking reality for any spouse.

Mental Illness and Caregiver Relationships

The chronic stress of caregiving for a family member with mental illness has adverse effects on the mental and physical wellbeing of the partner providing the care. The partner feels emotional exhaustion, depression, and anxiety. This relationship dyad parallels the psychological and physical stressors within a neurodiverse relationship. Mental illness is a ubiquitous problem that affects every person irrespective of socio-economic status, age, gender, orientation, culture, or nationality. Mental illness is a problem of the mind that affects thought, mood, behavior, or feelings (CDC, 2023-g, April 25) and ranges in severity from minimal or mild to completely debilitating where hospitalization is needed. According to Mental Health America (n.d.) there are over 200 mental illness disorders that may have a causal connection with genetic factors, biochemical imbalances, personal or environmental stressors, or idiopathic origins.

The CDC (2023-g, April 25) estimated that over 20% of the American population were afflicted with mental illness. The United States Census Bureau (2020) reported a current total

population in 2020 of 329.9 million people, of which an estimated 256.3 million were adults (approximately 77.7% of adults in the total population per 2019 statistics; United States Census Bureau, n.d.). According to the National Alliance for Caregiving (NAC) and the American Association of Retired Persons (AARP) Family Caregiving Research (2020), there were 47.9 million caregivers in United States in 2020. The Substance Abuse and Mental Health Services Administration (2019) reported an estimated 47.6 million adults over the age of 18 years with a mental illness diagnosis. This reflects an approximate 1:1 ratio of caregivers to recipients (Caregiving in the U.S., 2020).

The disruption caused by mental illness extends beyond the afflicted individual to the unpaid caregiver responsible for the maintenance and safety of the mentally ill person. The majority of caregivers in the United States did not plan for the role of caregiver and were inexperienced, unprepared, and had very little, if any, support (Chadda, 2014; Family Caregiver Alliance, n.d.; NAC and AARP Family Caregivers, 2020). Over 65% of caregivers have a college degree or higher and almost half the caregivers have a household income of over \$75,000 (NAC and AARP Family Caregivers, 2020). The statistics on caregivers who juggle work and caregiving responsibilities ranged from 1 in 6 (Substance Abuse and Mental Health Services Administration, n.d.) to 61% of caregivers who worked while caregiving (NAC and AARP Family Caregivers, 2020).

The impact of caring for a mentally ill family member can substantially affect the caregiver's life, including finances and mental and physical health. This is a consequence of deinstitutionalization decades in the making. In 1981, President Jimmy Carter signed the Mental Health Systems Act (Grob, 2005). Its purpose was to improve mental health accessibility and services in the community for people with chronic mental health issues. The following year,

under a different administration, it was repealed with the Omnibus Budget Reconciliation Act which immediately cut federal mental health spending by 30% (Stockdill, 2005). Over the decades, federal spending toward mental health continued to decrease and mental health facilities throughout the country slowly disappeared by the tens of thousands. After the financial collapse of 2008, \$4.35 billion was cut from mental health support and services and thousands of beds for the mentally ill were finally closed completely (Lippman, 2012). Over the decades, the burden of care for the mentally ill has been increasingly placed on family and friends who have limited resources and minimal support.

Several common themes identified in the literature reflect an overwhelming propensity for adverse and chronic repercussions to the caregiver. These themes include high levels of stress, low quality of life (QoL), depression, anxiety, loneliness, social isolation, declining mental and physical health of the caregiver, burnout, and financial strain (Akbari et al., 2018; Chadda, 2014; Jeyagurunathan et al., 2017; Stanley et al., 2017). The hardship placed on the person who takes on the responsibilities of caregiving for an adult with mental illness is insidious.

Many mental illnesses can be cyclical, short term, or chronic. When the rhythm within a relationship changes due to mental illness, the unprepared caregiver cannot possibly foresee the magnitude nor duration of disruption that will present (Lewis, 2017-a). Caregivers with a higher QoL infuse a positive influence on the well-being and coping ability of their mentally ill family member (Caqueo-Urízar et al., 2017; Doron et al., 2014). Achieving a healthy QoL is the challenge for the caregiver. The endless cycle of responsibility of care creates an environment where the caregiver becomes physically and mentally exhausted from the daily challenges to the point their health begins to wane (Akbari, 2018). The financial strain of medication, medication

management, multiple specialty doctor visits, and missing or quitting work to be a full-time caregiver increases the stress within the caregiver–mentally ill family dynamic. A significant fear of caregivers is their safety; being harmed, or their mentally ill partner doing self-harm or committing suicide (Labrum & Solomon, 2018; Substance abuse and Mental Health Services Administration, n.d.). Social interactions diminish or stop completely, and feelings of isolation and loneliness pervade the caregiver. Mokoena et al (2019) found mental illness brings unpredictability and turmoil and has a negative effect on the family unit that is especially amplified if the caregiver endures burden. Autism shares similar impairments of schizophrenia with ToM deficits and poor inter- and intrapersonal connections (King & Lord, 2011). Studies on schizophrenia and NT couples regard their relationships lower in the areas of commitment, passion, and intimacy (Doron et al., 2014). It is unclear if the poor ratings of these relationship parameters are related to the limited emotional reciprocity or other deficits inherent within the diagnosis of one partner's illness, or due to other confounding factors, but the outcome is consistent with satisfaction studies on relationships with a mentally ill partner.

It is important to consider the multitude of needs of the caregiver with support resources and coping strategies to help mitigate the range of burdens. Caregivers need access to social services, transportation, educational support, coping strategies, financial help, respite opportunities, support groups, and a plan of care for themselves. Lewis (2017-b) suggested an excellent support plan with the use of leverage points at optimal times in the relationship process where nurses could affect positive impact. At the first point, nurses use their teaching skills to suggest constructive coping habits that help address underlying issues. At the second point, the nurse helps each partner understand the authenticity of the situation to empower both partners.

As Akbari et al. (2018) succinctly noted, "if caregivers [are] left without adequate social support, they can also be considered as hidden patients" (p. 2).

Sensitizing Theories

Romantic intimate relationships can be a challenge for anyone to navigate, and it can be especially difficult for the person with autism who struggles with socio-emotional reciprocity, social cues, and physical intimacy. The literature is filled with a multitude of theories for romantic relationships that define concepts and constructs specific to the relationship itself, as well as the role of the partners who are participating in the relationship. Two theories that had relevance to this study suggested possible themes and parameter contexts for understanding implicit expressions within the neurodiverse relationship. The first theory was *affection exchange theory* that posits affection is important for bonding in relationships and necessary for the survival of the relationship. The second theory was the *equity theory*. This theory has a more pragmatic approach and underscores interaction and participation within a relationship in terms of equitable gain or loss. Essentially, partners who feel equitable distribution of effort within a relationship are content. Both theories outline constructs within the intimate relationships that are necessary to sustain the health of the relationship.

Affection Exchange Theory

As mentioned previously, most humans want to love and be loved (Baumeister & Leary, 1995). However, the desire for intimate connection versus the ability to express these feelings may be difficult for individuals with autism. Affection exchange theory (AET) operates from the position that affectionate behavior is vital for the thriving of intimate relationships (Horan & Booth-Butterfield, 2010). Floyd (2002) postulated that "AET makes explicit links between the

expression of affection and human viability..." (p. 136) of a long-term liaison that facilitates innate protective advantages inherent within healthy relationships. Affectionate communication is the bedrock of loving, personal relationships (Floyd & Morman, 1998). The authors explained that affectionate gestures are a form of communication that may be expressed implicitly, explicitly, or indirectly with actions such as saying "I love you," a wink from the other side of the kitchen, or a soft touch on your shoulder while watching TV together. These sometimes ambiguous yet deliberate intentions reinforce the relational bond with their partner (Horan & Booth-Butterfield, 2010). Affectionate communication has a beneficial influence on physical and emotional health, cognitive clarity, anguish, and feelings of isolation within the relationship (Floyd, 2002). The positive biological side effects of affectionate communication are noteworthy. Horan and Booth-Butterfield (2010) noted studies of cortisol and cholesterol levels positively affected by the lower stress levels that are evident as a result of affectionate interactions.

An individual with autism may feel *affection* for their partner but not as easily show *affectionate* behavior toward their partner, which is an integral factor of AET in personal relationships (Floyd & Morman, 1998). Conversely, affection deprivation is "wanting more tactile affectionate communication than one receives" (Floyd, 2014, p. 383). As affection is postulated to be an essential human need, affection deprivation may obstruct human well-being (Floyd, 2014). The literature has abundant studies that suggest the holistic benefits of physical touch and well-being (Chang, 2008; Edens et al., 1992; Cleary & Hungerford, 2020). Affection deprivation so strongly correlates with multiple physical and psychosocial deficits that "the absence of affectionate communication—specifically, tactile affection—is detrimental" (Floyd, 2014, p. 397).

Affectionate expression is vital to happy partners with high relationship satisfaction. AET benefits both the receiver and sender of affectionate behavior. High-affection communicators who are compared with low-affection communicators score higher in all measurement parameters including happiness, self-assurance, mental health, lower stress, depression, and feelings of social isolation (Floyd, 2002). Partners receiving affection feel relationship satisfaction and partners who give affection have a greater feeling of commitment (Horan & Booth-Butterfield, 2010). Affectionate behavior in an intimate relationship is strongly associated with physical health, mental health, and relationship well-being (Floyd, 2002; Hesse & Floyd, 2008). Together, these partners thrive in a long-term healthy relationship.

Equity Theory

The equity theory of relationships is based on the principle of proportionality or fairness. Equity theory is about shared overall investment in a relationship rather than petty tit-for-tat incidents or *quid pro quo* (Hatfield & Rapson, 2012). Partners who assume a reasonable balance of benefits from, and contributions to, the relationship feel content and satisfied with the relationship (Hatfield & Traupmann, 1981). There is a cohesive equilibrium with each other and within the relationship. Conversely, a partner who feels disparity from an imbalance of net contribution in the relationship becomes aware (on a conscious or subconscious level) of the inequity which creates relationship dissatisfaction. Inequity in a relationship is about the perception of unfairness that invokes negative emotions within the partner who feels a net negative imbalance (Guerrero et al., 2008). Negative emotions from the partner bearing the lion's share are asserted through anger, guilt, sadness, resentment, aggression, destructive or antisocial behaviors, distress, or sadness where the partner self-isolates and disengages (Davidson, 1984; Guerrero et al., 2008; Hatfield & Traupmann, 1981). Female partners are often more sensitive to

marital injustice than male partners, especially when they feel they are carrying the heavier load (Guerrero et al., 2008; Stafford & Canary, 2006).

Inequity over time that is not addressed leads to the dissolution of the relationship. To mitigate an imbalance, a partner improvises behavioral changes such as "working harder" in the relationship to re-establish equitability, or cognitively re-evaluate what they thought was inequitable before and modify their perception and "see it differently" (Cartledge, 2018). Stafford and Canary (2006) found partners who have feelings of happiness and satisfaction in relationships perceive an equal outlay of effort toward the relationship, ongoing positive communication, and proportionate distribution of shared tasks.

An individual with autism who has ToM deficits, weak central coherence, and/or empathy deficits may not be aware of an equity balance within the framework of the relationship. A fixated or rigid thinking process precludes opportunities to participate with certain tasks because it may not "be their job." However, if there are personality strengths that are equally similar in each partner, such as love or honesty, it generates other benefits to the relationship (Young, 2017) which offsets some of the neurodevelopmental deficits that interfere with typical relationship dynamics. The individual with autism participates in other areas they excel at to bring an equitable balance into the relationship so neither partner feels unsatisfied, and both feel they participated. The partner with autism may not pick up on the signals of marital unhappiness or dissatisfaction, which may further add to the imbalance and precipitate higher dissatisfaction for their partner. Alternatively, the partners could negotiate equity with an outcome that is fair, so both feel satisfied in the relationship (Cartledge, 2018).

Extending the Role of the Mental Healthcare Professional

The role of the mental health professional who provides therapy to neurodiverse couples is well positioned to augment the American healthcare system (Bisognano & Institute for Healthcare Improvement, 2010; Salmond & Echevarria, 2017; Sullivan, 2018). This study explored the social process(es) mental health professionals use to provide therapy to neurodiverse couples. The role of the mental health professional extends to helping adults with autism overcome the global health challenges with resources, support, advocacy, and guidance.

Studies report that most physicians lack knowledge, resources, and training to recognize, diagnose, or treat patients with autism; and patients with autism reflect poor experiences with higher unmet healthcare needs from physicians and healthcare facilities (Zerbo et al., 2015). There are nearly 4 million nurses on the frontline of healthcare, the largest healthcare profession in the country (American Association of Colleges of Nursing, n.d.). Nurses were the most trusted profession in America in 2020 (American Nurses Association, 2020; National Nurses United, 2020) and are in the best logistical position to effectively lead and advocate for the healthcare needs of this invisible population.

A projection study estimated nearly 5.5 million adults with autism may be undiagnosed or misdiagnosed hiding-in-plain-sight (Brugha et al., 2011; CDC and Prevention, n.d.-e). People with autism who have difficulty with socio-emotional reciprocity, awkward social interaction skills, and fixated or repetitive patterns of behavior also struggle with healthcare experiences. Individuals with autism have poor experiences in healthcare settings due to biases, unmet healthcare needs, lack of appropriate health promotion, disparities related to individual behavior, poor communication (sending and receiving), and lack of fundamental ASD knowledge by the healthcare professional toward the patient with autism (Krahn et al., 2006; Mason et al., 2019;

Zerbo et al., 2015). The frustration for the patient with autism is unrelenting when healthcare providers are unable to decipher effective ways to communicate, due to lack of knowledge concerning rigid thought processes or atypical communication patterns (Mason, 2019; Zerbo et al., 2015). The disconnect adults with autism have within the healthcare system extends to their neurodiverse relationship. The healthcare professional who struggles with communicating with the patient with autism also struggles with providing effective care and instruction for either partner in the neurodiverse relationship. The healthcare professional who is not trained to be autism informed may be frustrated by the difficulty of sharing information with neurologically distinct patients who process information very differently.

The role of the nurse is crucial to facilitate a beneficial outcome for the adult with autism and their NT partner. The trained autism-informed nurse is perfectly positioned to meet the needs of all patients with their knowledge skills of autism: informal screening of all patients, identifying those who may be undiagnosed or misdiagnosed with autism, and setting up the patient experience that addresses their neurodevelopmental needs.

It is imperative for professional nurses to understand the clinical presentation of autism and the barriers that hinder the person with autism and their NT partners. The autism-informed nurse is aware of ASD-specific characteristics such as EF disorder, sensory stimulation, and communication deficits, and thus avoids assuming the patient understands a health explanation or diagnosis when, in fact, they may not (Nicolaidis et al., 2014). Effective communication with partners who are neurodiverse and in neurodiverse relationships is complex due to the ASD heterogeneity of each person. Adjusting communication style, decreasing stress, and allowing time to calm down is helpful for the person with autism. Respectful speaking with sensitivity that is slow, concrete, precise, and direct, while refraining from assumptions about the person or their

needs (Nicolaidis et al., 2014, 2015; Mason et al., 2019; Zerbo et al., 2015) will create a receptive setting, while fostering trust. Time must be allowed for information to be processed and the healthcare professional should be aware of their own feelings of frustration or agitation when an autistic person just doesn't seem to understand (Barber, 2017).

The psychiatric nurse practitioner (PNP) who provides therapy to adults with autism may investigate beyond the patient to discover an NT partner who may not be aware of the clinical presentation of ASD and its effect on their neurodiverse relationship. The PNP may recognize the NT partner's distress before the partner is able to articulate the socio-emotional deficit they are experiencing in the relationship. The PNP acknowledges that an adult's presentation of autism differs from a child's behavioral presentation as the adult may have effectively learned to mask symptoms (Lewis, 2018). Studies estimate that about 50% of individuals are not correctly diagnosed with ASD (Attwood, 2015; Baron-Cohen et al., 2009; Luciano et al., 2014). The randomness of missed diagnoses and lack of accurate diagnoses may be associated with a current lack of standardized autism survey methodology (Fombonne, 2018), inexperienced practitioners (Luciano et al., 2014), or changes in diagnostic criteria from the DSM-IV to the DSM-5 (Smith et al., 2015). The PNP is a vital link to capture the *big picture* of ASD through first-line recognition and accurate identification of undiagnosed or misdiagnosed autistic patients and to spotlight support that is needed for the NT spouse.

Adults with autism who have deficits with social-interaction skills need to learn coping skills and those without deficits need to be educated on these deficits and what can be done to help. Social interaction is a reciprocal activity, and all parties can participate in the exchange. Communication is vital for the well-being of all persons in our communities and society. Interaction with both the NT partner and the adult with autism needs to appreciate expression

and comprehension is different depending on the typical or atypical neurology of the person communicating (Nicolaidis et al., 2014, 2015). Autistic traits may not be easily distinguished, especially if the patient is masking or camouflaging their symptoms to avoid detection, but the autism-informed nurse is the best advocate for the diagnosed and undiagnosed patient.

Conclusion

The prevalence rate of adults with autism, nationally and globally, is increasing at a rapid rate. Predicted costs for the tangible and intangible needs of individuals with autism are astronomical and increasing. Identifying neurobiological genesis and genetic variations specific to autism can offer information into understanding how biology translates into clinical behavioral. Healthcare professionals use this insight to design effective therapeutic methods to overcome deficits and improve relationship obstacles. The neurodiverse couple has unique challenges that are not found in other relationships. To appreciate the exclusive disposition found within the domain of the NT/ASD relationship warrants becoming acquainted with several sensitizing concepts to inspire contemplation. Individuals with incongruous neurologies understand the world differently, which challenges a neurodiverse couple's ability to connect on the same page. The unique neurology of the partner with autism affects their ability to communicate. It affects their ability to perceive perspectives outside of the self and, in some people, they are unable to comprehend "the self." Lacking the intuitiveness of intangible concepts, such as nonverbal gestures and emotions, that naturally occur in intimate partner relationships and are often taken for granted, puts strain on the partner with autism and brings tension into the relationship. Partners with autism have effectively learned how to hide their

deficits from the world, which adds another layer of complexity to the NT/ASD relationship dynamic.

Identifying analogous issues in other relationship dyads gives guidance to understanding how these dyads have been studied and what barriers remain unresolved. These observations help form and guide understanding in the neurodiverse dyad. Healthcare professionals who provide therapy to neurodiverse relationships have a responsibility to identify gaps, develop coping strategies, and protect individual integrity that affects the personal and professional milieu of millions of neurodiverse couples.

Theories about intimate relationships offer guidance toward an infrastructure for the neurodiverse relationship. The theories included in this study parallel relevance to neurodiverse relationships. It is important for healthcare professionals to help neurodiverse couples feel supported to maintain their relationship and independence. Healthcare professionals counseling neurodiverse couples effects cost saving in healthcare. It is important to understand how ToM deficits, central coherence, and EF affect the mental health professional's therapy plan of care for the neurodiverse couple.

For decades the literature has grown, with increasing diversity and complexity, in autism research. Research is investigating causes, pathology, neurobiology and brain connectivity, biomarkers, genetics, behavioral disorders, and diagnostic screening. Early research focused primarily on the areas of infant and child development, early diagnostic-tool development, and behavior management. Current literature is increasing with research in adult autism. Currently there are no surveillance systems in place to monitor prevalence rates of adults with autism. There are no epidemiology studies in adult autism. There is a paucity of data on the psychodynamic implications of neurodiverse relationships within the literature. Recent research

studies that have explored neurodiverse relationships agree that the mental health of each partner needs to be further investigated.

There is a gap of information on how different neurologies affect each partner. Research is needed to explore problems within neurodiverse relationships, how these problems affect each neurologically unique partner, and what therapy the mental healthcare professional is providing to these neurodiverse couples who seek help. There is a gap of knowledge in training and education of healthcare professionals and therapists in neurodiverse relationships and explicit education in: how core deficits affect the mental health of the person with autism; how the effects of core deficits of the autistic person transfer to the neurotypical people in their lives; and the inevitable psychosocial impact that occurs within their neurodiverse relationship. This study begins to fill the gap of understanding the biopsychosocial implications of distinct neurologies within a neurodiverse relationship and the social processes mental health professionals use to develop therapy to help mitigate these relationship problems. This study allows nursing science to open the door to a critical paradigm shift in healthcare toward establishing special-needs care, communication, and treatment with the development of a specialized skill set to identify individuals with autism and the significant people in their lives.

Future studies should include healthcare professionals integrating therapy tools with multidisciplinary teams for broad and effective communication with the neurodiverse population. Mental health professionals who provide therapy should work together with other professionals to identify and optimize experiences for neurodiverse couples. This study uncovers social processes important to mental health professionals who provide therapy to neurodiverse couples that add insight for improved treatment. Autism-informed nurses are effectively prepared to foster positive change by redefining the lifetime trajectory of neurodiverse couples. The ripple

effect will affect healthcare experiences and impact the long-term benefits of social costs and healthcare savings for millions of children, adolescents, adults, and elderly people who live with autism.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

The purpose of this study was to explore how mental health professionals provide therapy to couples with diverse neurologies; how socio-emotional or socio-communicative deficits are recognized within the relationship; and how unhealthy relational behavior within the neurodiverse partnership is identified. The mental health professional who provides therapy to the neurodiverse couple must be cognizant of the parameters of the couple's unique neurologically diverse frameworks, then mitigate this knowledge into a therapy that is effective and understood by both partners in the relationship. Currently, there are no known therapy guidelines for therapists who work with neurodiverse couples. It is unknown how therapists provide therapy to these neurodiverse couples. The best approach for this study was a qualitative research design. This design was chosen to explore the social process(es) mental health professionals use to identify and understand the intrapersonal core deficits each partner may or may not recognize; the interpersonal psychodynamic interplay that has manifested within the neurodiverse relationship; and ultimately how the identified issues are addressed. The research methodology for this study used a version of grounded theory (GT) approach because of its inductive process for inquiry, systematic data collection, and constant comparison analysis for a substantive theory(s) that is constructed from the data. This study was designed using a constructivist framework that postulated researcher and participants assimilating personal interpretation and philosophical realism. Data is shaped from people constructing meaning. This meaning affects behaviors in certain social conditions, such as behaviors used to counsel neurodiverse couples.

Methodology

Background

Prior to the introduction of GT methodology, quantitative research dominated scientific inquiry. Qualitative researchers did not have a systematic method of verifying data or generating theory (Strauss & Corbin, 2007). It was during this positivist paradigm that qualitative studies were not valued by the scientific community as they did not subscribe to the methodological assumptions at the time (Charmaz, 2014). The scientific community believed "scientific logic, a unitary method, objectivity, and truth legitimized reducing qualities of human experience to quantifiable variables... and verifiable quantitative knowledge" (Charmaz, 2014, p. 6). The position at the time was to verify theory, not generate theory. Glaser and Strauss (1967) objected to the prevalent influence of quantitative research of the time and believed theory could be generated from actual research rather than developed a priori (Charmaz, 2014). The legacy of this belief became known in the research community as the methodology of grounded theory.

During the mid-20th century, Paul Felix Lazarsfeld, an Austrian mathematician, who later became an Austrian American sociologist, co-founded mathematical sociology, which included his teachings of contextual analysis (Jerábek, 2001) and inductive quantitative analysis (Walsh et al., 2015). In the 1950s, Barney Glaser was a former student of Lazarsfeld and the American sociologist, Robert Merton, who developed middle-range theory construction (Bailey, 1991; Walsh et al., 2015). This mentorship sowed the seeds for a framework Glaser would embrace and cultivate into an insightful methodological approach to social research. This approach (GT) would be codified to inductively generate theory for systematic qualitative inquiry and uphold the rigors of scientific inquiry (Bryant & Charmaz, 2007, 2014; Inaba & Kakai, 2019). He often attributed his beginning vision of GT to Lazarsfeld, Merton, and other sociologists, as he

compartmentalized the positivist tradition dominating the social mores of the time (Holton, 2011).

Conversely, Strauss—and by extension the underpinning of first-generation GT—tended to lean toward a pragmatist disposition (Bryant & Charmaz, 2007; Evans, 2013; Kenny & Fourie, 2015; Rieger 2018). During the 1930s, sociologist Anselm Strauss, who subscribed to the symbolic interactionism (SI) tradition, augmented the context of his social theory perspective from many mentors and years of iterative processing of many theoretical concepts. A prominent mentor in Strauss's early life was the sociologist Herbert Blumer who introduced him to Si. Although the concept was coined by Blumer, it was the influence of George Herbert Mead, an American philosopher and social psychologist, who amplified the tenets of symbolic interactionism with his studies in pragmatism and social behaviorism (Charmaz, 2014; Dingwall, 2011; Strübing, 2019). Once again seeds were sown into the mind of a student—this time Strauss—by the philosophy of Mead and the teachings of Blumer that included the significance of interaction, symbolic meaning in things, language, and specifically the importance of connecting theory with data (Corbin, 1991). These beginnings set down the groundwork for Strauss's evolving frame of reference. Strauss's studies focused on concepts such as procedures, structure, order, organization, and the study of action at the collective and organizational levels (Charmaz, 2014; Corbin & Strauss, 1990; Evans, 2013).

By the time Glaser and Strauss met in 1960 at the University of California, their influences, perspectives, and research were diverse, yet complimentary (Corbin & Strauss, 2015). Glaser believed the GT method could be used with either qualitative or quantitative inquiry (Bryant & Charmaz, 2007). His contributions toward the development of GT included the contextual paradigm that GT "is not a qualitative research methodology but rather a general

methodology for the development of theory using any and all types of data...[making] GT ontologically and epistemologically flexible" (Glaser & Strauss [1965] in Walsh et al., 2015 pp. 585–586). Strauss's work focused on two primary aspects: those of process and perspective (Charmaz, 2014; Strübing, 2019). Strauss was less interested in the *symbolic* aspect of Blumer's SI and instead refined his own theoretical position to approach *process* and *perspective* with a focus on action and activity (Strübing, 2019). He evolved a pragmatist interactionism posture for GT to address social activity and the value of interaction for framing activity or action (Charmaz, 2014; Morgan, 2020; Strübing, 2019). Strauss developed a respect for "organizational and processual aspects of the social [order]" (Strübing, 2019, p. 53). Their collaboration would create what would become a pioneering qualitative research method known as grounded theory.

In the early 1960s, Glaser and Strauss (1965) observed patients who were terminal or dying in hospitals and did not know they were dying. The American attitude toward death was aversive and research studies on death and dying were "slim and neglected" (Feifel, 1963, p. 66; Glaser & Strauss, 1965). Hospital professionals did not discuss the process of death and dying with patients even when the patient asked for this information directly. Glaser and Strauss undertook a novel study that became the first scientific inquiry to collect qualitative data and generate theory on the dying in hospitals (Birks & Mills, 2015). Specifically, Glaser and Strauss were studying the interaction between care staff and patients. The researchers took a "birds-eyeview" of the process within the framework of the hospital and researched "negotiations within and between people and departments at varied organizational levels...[interpreting] the hospital as a negotiated order and [analyzing] this order [to demonstrate] how researchers could study the construction of individual and collective action and the intersections between them" (Charmaz, 2014, pp. 233–234). The authors documented interviews, conversations, and observations that

focused on the context of social action and the process of death and dying. Their aim was to understand the social process of "how [hospital professionals] manage themselves and their patients while [the patients] are dying" (Glaser & Strauss, 1965, p. viii). They went beyond exploring or describing the phenomenon to make substantive sense of the data that lead to theory generation and the first-generation of GT.

GT Underpinnings

Symbolic Interactionism

SI is an underpinning of GT. It is an abstract theoretical framework that examines the operationalization of societies from the perspective of the interaction of individuals (Carter & Fuller, 2015; Charmaz, 2014). Herbert Blumer, an American sociologist and the forefather of SI, understood that a social system is made of people interacting with each other, and it is the symbolic nature and *meaning* behind this interplay that social scientists use to understand social processes, inter-relation interactions, and human behavior (Carter & Fuller, 2015; Jeon, 2004; Plummer, 2000). SI attempts to interpret human points of view, understand the perspective from the individual, and describe the meaning a person attributes to things that help them make sense of the greater social world (Carter & Fuller, 2015). Blumer (1954, 1969) asserted that one's actions are predicated by how they understand the empirical world. The meaning attributed to something can change over time based on environmental or interpersonal synergies and is reconciled through interpretation or symbols (Blumer, 1954, 1969, 2005).

The inception of GT informed by SI was shaped by Strauss. SI allowed the researcher to get a glimpse of realities individuals use to engage in the world (Charmaz, 2014). Strauss enmeshed SI into the fiber of grounded theory that facilitated how GT was operationalized. SI offers grounded theorists an interpretive framework from which the researcher draws inferences

from a shared reality. It is illogical to assume reciprocity between researcher and participant does not exist during the generation of data (Birks & Mills, 2015). The multiplicity of views of reality are seen in Blumer's (1954) view of reality in an empirical world as interpretive and the antithesis of "absolute sociological truth" (Blumer, 1954); to Strauss's perception of a "universe marked by tremendous fluidity" (Strauss, 1978, p. 123); to Charmaz's position of a discoverable reality that is relative as expressed through the perspective of all participants (Birks & Mills, 2015; Charmaz, 2014). The ontological relativism of SI offers a bird's eye view of multiple perspectives of social reality.

Pragmatism

Pragmatism is a philosophical attitude that has utilitarian applications. Pragmatism is defined as a philosophical tradition that "understands knowing the world as inseparable from agency within it" (Legg & Hookway, 2020). Essentially, pragmatism takes the stance of utility. Pragmatism is a philosophical ideology that posits "a proposition is true if it works satisfactorily, that the meaning of a proposition is to be found in the practical consequences of accepting it, and that unpractical ideas are to be rejected" (McDermid, n.d.). Pragmatism was originated in the nineteenth century by a mathematician, Charles Peirce, and a psychologist and moralist, William James; they were later joined by a philosopher and psychologist, John Dewey. These founders supported the premise that theories and frameworks should be evaluated according to their inquiry—that is, yields and consequences—rather than their outcomes. Basically, can a theory solve a problem or put in another way, does the theory "work" (McDermid, n.d.; Morgan, 2014)? Pragmatism is associated with a number of tenets that have endured over years of multiple pragmatism perspectives suggested by philosophers. Common tenets include the idea that knowledge, concepts, and values are valid if they have use; reality is not static or fixed; people

cannot be neutral when observing the world; truth is relative; objects have meaning from interaction with people who ultimately define it; and knowledge has no purpose unless it leads to human action (Harvey, 2019). Pragmatism as a paradigm for grounded theory assumes substantive theory should be useful in the context in which it is being used, and theory needs to have a practical application or purpose, such as to develop a guideline or inform practice.

Grounded Theory as Method

Less than 60 years after Glaser and Strauss's original study, GT continues to be the optimal method of theory generation and verification for novel qualitative research. GT endured as a dynamic qualitative research methodology by evolving with, and accommodating, varying philosophical influences that emerged during times of historical and social change (Birks & Mills, 2015; Charmaz, 2014; Wu & Beaunae, 2014). Glaser and Strauss (1967) developed GT during a time when philosophical ideology was rooted by a postpositivist framework borne of scientific inquiry to research (Birks & Mills, 2015; Creswell & Poth, 2018; Wu & Beaunae, 2014). This time was marked with scientific investigation that began with a theory, followed by an assumption that truth or reality was probably not absolute and that all observations were subject to error, rather than the belief that data needed to be observed and measured using methods to reduce error, while surveying the behavior of the participants within a quantitative design (Birks & Mills, 2015; Creswell, 2014; Creswell & Poth, 2018). The postpositivist tradition was believed to shape informed knowledge while the researcher disconnected from the data by compartmentalizing their biases (Birks & Mills, 2015; Creswell, 2014; Creswell & Poth, 2018). Amid cultural unrest in the late 1960s and early 1970s, the worldview shift influenced scientific inquiry by drifting away from truth being seen as external and objective, to more

interpretative and inclusive of context to give meaning (Birks & Mills, 2015; Creswell & Poth, 2018). In other words, there was a trend toward inductive theories that integrated complex perspectives constructed from our understanding of the social environment (Birks & Mills, 2015; Creswell, 2014; Creswell & Poth, 2018).

Social scientists of the time were governed by the edict of verifying theory but struggled with finding a methodology that connected theory with qualitative research, or cultivated further scientific inquiry by generating new theories. (Glaser & Strauss, 1965, 1967). Social research could not prevail if the expectation to conform to the canons of quantitative benchmarks—that did not fit the province of qualitative inquiry—continued (Glaser & Strauss, 1967). The authors confronted the accepted hypothetico-deductive method with an innovative methodology that generated theory from the data using a systematized format for collecting, coding, and comparatively analyzing, that concurrently validated and verified the data (Birks & Mills, 2015; Corbin & Strauss, 1990; Creswell & Poth, 2018; Glaser & Strauss, 1965, 1967; Kelle, 2007).

Rather than qualitative researchers' use of deductive processes from prior theories, GT is an iterative, inductive, and methodical approach to discover and analyze data (Thornberg & Dunne, 2019). It employs a systematic method that engages in a nonlinear, recursive process of identifying and integrating categories of meaning from the data. It offers a flexible framework for researchers and participants to work together to make sense of the data derived from the world, interpret it, and construct theory (Creswell, 2014). The basic tenets of GT include: (a) theory generation from the evidence and knowledge systematically garnered while conducting the research; (b) simultaneous data collection and analysis which involves constant comparative analysis and theoretical sampling; and (c) theory emergence from the data obtained (Charmaz, 2014; Harris, 2014). Features common to all approaches of GT included the constant comparison

method, theoretical sampling, theoretical sensitivity, theoretical saturation, and the resulting core category of the substantive theory. Understanding the processes involved in the GT method provides a guideline of systematic steps of iterative collecting and analyzing of data and a platform from which theory is constructed (Charmaz, 2014).

Grounded Theory Processes

Constant Comparison Method

Constant comparison is a long, inductive process of systematically comparing data with data, or code with code, to understand, conceptualize, and categorize the data (Charmaz, 2014; Engward, 2013; Glaser & Strauss, 1965, 1967; Jeon, 2004). Constant comparison is part of the category-building process. It is a dynamic and iterative process that involves constantly comparing data, codes, categories, and concepts within corresponding groupings (data with data) or contrasting comparisons (category with concept; Charmaz, 2014). This continual process of analysis eventually gleans increasingly rich data until it compels the researcher to ask, "Where can I find another comparison group that differs in one more specified respect?" (Glaser & Strauss, 1965, p. 279). The authors pointed out that this systematic process generates many credible contexts which culminate with the formation of substantive theory (Glaser & Strauss, 1965). Comparison groups of data augment the credibility of an emerging theory by providing the researcher with comparative facts that produce groupings of categories that increase generality or descriptive context (Glaser & Strauss, 1967). The authors illustrated that this method of constant comparison of multiple data groups spotlights the similarities and differences in these groups which ultimately "contribute to the generation of theoretical categories, to their full range of types or continuum, their dimensions, the conditions under which they

exist...generate generalized relations among the theoretical categories,...become the hypothesis soon integrated into the substantive theory" (Glaser & Strauss, 1965, p. 290).

Data Collection

The process for GT as outlined in Glaser & Strauss's *Awareness of Dying* (1965) began with a *sample selection* from a substantive group where the phenomenon was found. In the case of Glaser & Strauss's study, their setting and substantive group was everyone directly and peripherally involved with the dying process anywhere—with no limits—including the medical and nursing staff, staff meetings, the actual dying patient, the family of the patient, interactions, conversations, visitors, and the administration of the environment. Data collection was obtained using two primary mechanisms; the first used interviews, direct observations within the setting of interest, and tape recording when applicable; and the second was "fieldwork" auditing. The authors were strong proponents of "intensive fieldwork" that allowed them uninhibited freedom of movement and unlimited interviewing and observation at any time—morning, noon, or night (Glaser & Strauss, 1965). Data now includes videos, literature, archives, and other material, as noted by Glaser (2007) in his statement, "All is data."

Glaser strongly emphasized the importance and value of taking fieldnotes as data (Charmaz & Keller, 2016). Fieldnotes are taken at all times, immediately with observations, and after-fieldwork recollections are scrutinized to eventually form an analytic framework. Fieldnotes from fieldwork are not the same as memo writing. The authors believed that full immersion created "real-life" insight of fieldwork knowledge that generates significant awareness (Glaser & Strauss, 1967). Glaser and Strauss (1967) believed hypotheses were likely to present within the field. Field notes are observations, thoughts, insights, and knowledge from the field that are generalized and can be systematically assimilated into theory (Glaser & Strauss,

1967). An analytic framework begins with the fieldnotes with analytic comments from the field and memo writing (Glaser & Strauss, 1965).

Memo writing is higher-level reflections or processing of information to support theory generation. "Memo writing on the field note provides an immediate illustration for an idea" (Glaser & Strauss, 1967, p. 108). Memo writing is done throughout the entire process of data collection and analysis. Memos are used for coding, collecting data from field notes, theoretical ideas, clarifying and integrating categories, defining relationships, and distinguishing gaps (Glaser & Strauss, 1967).

Theoretical Sampling

One main feature of data collection is theoretical sampling. The study begins with a purposive sample, and as concepts are discovered and categories developed from coded data, the sample shifts to one that theoretically informs the concepts and categories. Therefore, theoretical sampling is simply assessing the emerging theory against more data. It is informed by data collection, coding, continuous comparison, and memo writing (Engward, 2013; Glaser & Strauss, 1967). It is an important, complex process of GT (Charmaz, 2014; Corbin & Strauss, 1990; Coyne, 1997; Engward, 2013). Theoretical sampling affects the quality and integrity of the data that is vital to the process for theory generation (Jeon, 2004; Morse & Clark, 2019). It supports rigor (Maher et al., 2018; Ravitch & Carl, 2016). It is a "process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes data, then decides which data to collect next and where to find them, in order to develop theory as it emerges" (Glaser [1978] in Coyne, 1997). Theoretical sampling is a much more extensive process than other forms of sampling in that it is compelled by emerging categories and theory augmentation that is systematically constructed from the data with built-in checks and balances (Charmaz,

2014; Jeon, 2004). If a category emerges that seems to encapsulate adapting to a difficult situation, the researcher may sample literature that discusses concepts and studies regarding adaptation to see how adaptation has been defined, features of adaption, and other aspects of adaptation in social conflict, or find an environment where adaptation is taking place to observe incidents and events. For example, in this study, recruiting a new therapist, revising the interview questions, or observing a therapy session were sampling strategies to re-align data-gathering to clarify emerging categories. Coding and memo-ing would occur from the sample to clarify and densify the category and raise it to a more theoretical/abstract level. Theoretical sampling occurs with literature, people, or other sample sources. The bedrock of GT is construction of theory with constant comparative analysis from data obtained through theoretical sampling.

Coding

Coding is a vital tool in all GT approaches. It provides an "analytic handle" to correspond with other elements of data (Charmaz, 2014). Glaser and Strauss developed coding as a strategy for "generating and plausibly suggesting many categories, properties and hypotheses about general problems" (Glaser & Strauss [1967] in Kelle, 2019). The point of constructing codes is to break down the raw data to begin to make sense of it. This is early analysis. A code is a researcher-generated construct that symbolically represents an attribute of a segment of the data (Saldaña, 2016). For categories to be *constructed* from the data, raw data needs to be sorted and allocated into as many categories as possible. The iterative process involves constant comparing of coded data with raw data (Kelle, 2019). Later in the process, theoretical properties will begin to emerge. Coding and hypothesis testing began early in the research process as the authors felt it was important to "think systematically about the data" (Glaser & Strauss, 1965, p. 288) and generate opportunities to follow up on earlier codes in the analysis process. Coding involves

breaking data down and labeling concepts. Coding is part of a constant comparison analysis where coding data is broken into groups, these groups are constantly compared until they are arranged into categories. The iteration of coding, constant comparison, and data analysis early in the research process helps the researcher integrate the data with the added benefit of increasing depth and richness of information procured.

Comparison Analysis

Constant comparison analysis continues until the researcher recognizes the emergence of features. These features fall into one of two groups: researcher constructed concepts and concepts extracted from the situation (Glaser & Strauss, 1967). As the theory develops, "concepts abstracted from the substantive situation will tend to be current labels in use for the actual processes and behaviors that are to be explained, while the concepts constructed...will tend to be the explanations" (Glaser & Strauss, 1967, p. 107). As previously described, GT theoretical sampling is incorporated into constant comparative analysis and data collection where the researcher "collects, codes, and analyzes data and decides what data to collect next and where to find them, in order to develop...theory as it emerges" (Glaser & Strauss, 1967, p. 45). As a theory continues to emerge, this iterative practice continues to integrate categories and manage ongoing data collection (Glaser & Strauss, 1967). When the theory emerges, Glaser and Strauss (1967) "delimit" the theory and categories, essentially slowing down the process of incoming data (p. 289). This process generates theory that is substantive (empirical) or formal (conceptual) with varying levels of generality for either type of theory (Glaser & Strauss, 1967).

Theoretical Sensitivity

Researcher theoretical sensitivity is the degree of familiarity with the abstractness of a study phenomenon. A theoretically sensitive researcher will demonstrate sensitivity to emergent

patterns and recognize the distinct properties of categories. Theoretical sensitivity is a topic-specific insight of relevant data or sensitive issues. Theoretical sensitivity is the *gestalt* (whole is greater than the sum its parts) for the researcher when understanding phenomena. It involves being able to theorize (by trying out all explanations the researcher can think of) about the data through knowledge gained in a discipline, having ideas about the data, being able to recognize potential linkages, and hypothesizing (Charmaz, 2014). This leads to the ability to develop theoretical categories and concepts.

Theoretical Saturation

The underlying assumption of theoretical saturation is that further data gathering will generate no new information. The current debate in the literature challenges core assumptions of what exactly is saturation and what precisely is being saturated (Saunders et al., 2018). There are currently four models of saturation (theoretical saturation, inductive thematic saturation, a priori thematic saturation, and data saturation) that do not have congruent core assumptions (Saunders et al., 2018) and saturation as a *gold standard* for all qualitative research is being challenged (Malterud et al., 2016; O'Reilly & Parker, 2012). The term *theoretical saturation* originated with GT by Glaser and Strauss (1967). The authors posited that when saturation is reached, gaps in major categories will be nearly complete from:

maximiz[ing] differences in...groups in order to maximize the varieties of data bearing on a category, and...develop[ing] as many diverse properties of the category as possible. The criteria for determining saturation...are combination of empirical limits of the data, the integration and density of the theory, and the analyst's theoretical sensitivity (Glaser & Strauss, 1967, p. 62)

Saturation within GT is based on a sample size within the scope of ongoing overall analysis and new information that is compared with previous comparative analyses to identify similarities or differences (Glaser & Strauss, 1967). The legitimacy of saturation as the only criterion to justify data collection and analysis is being challenged (Charmaz, 2005). Charmaz (2005) argued that "often researchers [will] invoke the criterion of saturation to justify small samples.... Such justifications diminish the credibility of grounded theory" (p. 27). Charmaz continued "claims of saturation often reflect rationalization more than reason.... What [then] stands as adequate research?" (2005, p. 27). Charmaz answered this question by stating that researchers continually question the evolving patterns, categories, and relationships until no new properties can be found through memo writing and use of fieldnotes; by staying in the field longer (conducting several more interviews or observations to test the data through theoretical sampling); and if needed, recoding earlier data to see if there are still new clues. In other words, you have "defined, checked, and explained relationships between categories and the range of variation within and between your categories" (Charmaz, 2014, p. 213).

Approaches to GT

After the inception of GT, changing epistemological and ontological perspectives from competing influences, evolving assumptions, and shifting social paradigms opened windows of opportunities for variants of GT. The tenets of GT remain unaltered. These fundamental principles (comparative analysis, memos, theoretical sampling, theoretical saturation, and substantive versus formal theory) are congruous within the framework of later developed variants: classic, Straussian, and constructivist grounded theories (Kenny & Fourie, 2015). It is the differences from the original approach to GT that help to understand the genesis of each

tradition. This study used Charmaz's CGT framework with discussion to follow. Classic and Straussian grounded theories will first be summarized for context.

Classic Glaserian Grounded Theory

Glaser and Strauss collaborated on the original GT methodology and never worked together again. Classic Glaserian grounded theory (CGGT) stayed close to the original GT but expanded on coding. CGGT is unyielding about emergence of theory and natural discovery from the data (Kenny & Fourie, 2015). CGGT maintains the researcher is a neutral observer that has no part in theory generation.

Data Collection. Glaser did not subscribe to any particular methodology; rather he held a pragmatic position that focused on outcome (Creswell & Poth, 2018; Glaser & Strauss, 1965). He believed the CGGT method could be consistent in either qualitative or quantitative inquiry (Bryant & Charmaz, 2007) and believed CGGT "[was] not a qualitative research methodology but rather a general methodology for the development of theory using any and all types of data...[making] CGGT ontologically and epistemologically flexible" (as cited in Walsh et al., 2015, pp. 585–586). Glaser believed in "big data." Glaser contended that data can be made naturally objective if the researcher follows the "coding procedures, rigorously employs constant comparison, abstains from literature [a priori], and collects large...data from different sources" (as cited in Kenny & Fourie, 2015). CGGT closely parallels the original version of GT; however, it diverges with an emphasis on theoretical sensitivity and an effort to increase the precision of coding with the addition of theoretical coding.

Coding. CGGT expanded on the coding process from the original GT. To extract social processes from the data, Glaser created a coding scheme in two stages: substantive coding and theoretical coding (Kenny & Fourie, 2015). Substantive coding is split into two coding levels:

open and selective. The open code reflects empirical conceptual categories from the research data. Constant comparison analysis increasingly saturates the categories to reveal a principal core category (Kenny & Fourie, 2015). A theory emerges as the researcher integrates the categories into substantive concepts. Glaser firmly believed the researcher needs to be a neutral observer without a priori assumptions and to maintain a critical realist perspective (Charmaz, 2014; Rieger, 2018), but they must also have the skill set to "conceptualize and organize, make abstract connections, visualize and think multivariately" (Glaser, 2004, para 3.1). To facilitate this, Glaser developed *coding families* to help the novice researcher "conceptualize how the substantive codes may relate to each other as hypotheses to be integrated into a theory" (Evans, 2013; Glaser [1978], p. 72 in Kelle, 2007). Glaser (2004, para 3.1) believed this would help generate quality concepts and help with theory generation. Currently there are 18 coding families within theoretical coding to assist the researcher to increase sensitivity and coherency, integrate and construct theory (Böhm, 2004; Charmaz, 2014; Kelle, 2007). The limitation of coding is theoretical saturation (Wu & Beaunae, 2014).

Constant Comparison Analysis. Glaser contended that data can be made naturally objective if the researcher follows the "coding procedures, rigorously employs constant comparison, abstains from literature, and collects large...data from different sources" (Glaser [2002] in Kenny & Fourie, 2015). Glaser was a lifelong strong proponent of *memo writing* throughout out the entire process of data collection (Charmaz & Keller, 2016). Memo writing chronicles the theory construction journey (Charmaz, 2014). Glaser described four stages of the constant comparative method that include: (a) comparing data relevant to each category, (b) integrating categories, (c) delimiting the theory, and (d) writing the theory (Glaser, 2008; Glaser & Strauss, 1967). Glaser's stages are similar to the original GT format.

Straussian Grounded Theory

Data Collection. Straussian grounded theory (SGT) was published more than 20 years after the original version of GT by Glaser and Strauss. Strauss understood the abstractedness and interpretive nature of SGT. He also understood that his students needed a structure or blueprint to understand what to do because the novice researcher may be at risk for missing the essence of analysis due to lack of understanding the method. The research then "becomes superficial and fails to provide the novel insights into human behavior" (Corbin & Strauss, 2015, p. 1). He, along with Corbin, developed steps that include pattern recognition, use of memos, requirement of process in the theory, and defined coding steps that add a coding paradigm with a predetermined set of coding families in which categories are placed in order to verify hypotheses regarding the categories. SGT is often discussed among some researchers as too prescriptive, structured, or rigid (Charmaz, 2014; Charmaz & Thornberg, 2020; Evans, 2013; Rieger, 2018).

Coding. Corbin and Strauss put great effort into the process of coding to help researchers develop the mental strategies and skill set to get the process to the point where it "feels right" (Corbin & Strauss, 2015, p. 57). Coding in SGT includes a rich, prescriptive dynamic to develop a deep and insightful thought process. Coding consists of three stages: open, axial, and selective.

Open coding is a recursive process. Data is gathered, an exploratory process of analysis gives rise to multiple meanings while simultaneously recording (memo) the thoughts of the researcher prior to arriving at the meaning. Meanings are re-assigned repeatedly with constant comparison of previous and new data. Analyzing the meaning repeatedly brings new ideas, expansion of other thoughts, eliminating some views until finally an interpretation is achieved to label a category (Corbin & Strauss, 2015). Strauss, mindful that novice researchers have difficulty identifying authentic categories, added a step to coding called *axial* coding. A *coding*

paradigm was created within this step of axial coding. This coding paradigm includes four properties of context, conditions, strategies, and consequences that, when explored, can help sort, arrange, and link concepts to subcategories and categories (Bryant & Charmaz, 2019; Creswell & Poth, 2018; Kelle, 2007). Glaser argued the use of these additional concepts would cause researchers to "force' categories on the data instead of allowing the categories to 'emerge'" (Kelle, 2007, p. 141).

Constant Comparison Analysis. There were two analytic strategies that Corbin and Strauss used throughout the research process; the first was constant comparison and the second was asking questions (Corbin & Strauss, 2015). SGT uses two comparison tools: constant comparison and theoretical comparison (Corbin & Strauss, 2015). Constant comparison refers to examining data with another similar piece of data to determine if they share conceptual commonalities. This is an important process as it allows the data to become succinct, precise, and differentiated. Theoretical comparisons assist the researcher to focus on the dimensions and properties of concepts. Corbin and Strauss (2015) explained when the properties of a concept are not obvious, theoretical comparisons are needed to sensitize the researcher to what to look for in the data.

The second analytic strategy was "asking questions." This exploration led Strauss to evolve his perspective. SGT epistemological assumptions eventually shifted to a more social constructivist alignment, albeit mostly relativist, where knowledge is relative to what is believed (Charmaz, 2014; Corbin & Strauss, 2015; Rieger, 2018). The SGT position became "concepts and theories are *constructed* by researchers out of stories that are constructed by...participants who are trying to explain and make sense out of their experiences and lives" (Corbin & Strauss,

2015, p. 26). Strauss's work reflected his life-long position of SI. He added interpretivist and constructivist traditions to his methodology (Clarke, 2019).

Constructivist Grounded Theory

Charmaz was a student of Strauss and learned grounded theory methodology from Glaser while he attended University of California, San Francisco (Charmaz & Keller, 2016). It was during this postpositivist paradigm that Charmaz began contemplating the epistemological posture of relativity, subjectivity, and objectivity on an individual's world view (Charmaz, 2014; Charmaz & Keller, 2016). Charmaz formalized constructivist methodology at a time when the validity of GT methodology was being challenged for "fragmented" story lines and "authoritative" researchers by postmodern critics who suggested the methodology was outdated (Birks & Mills, 2015; Charmaz, 2014; Charmaz & Keller, 2016).

Why CGT. CGT shares elements from both the CGGT and SGT approaches. CGT is not as prescriptive as SGT but includes the iterative logic and flexibility of the method from SGT. CGT does not take the CGGT position of the researcher's neutral stance and is not consumed with theoretical sensitivity, but it does embrace the inductive, comparative, and open-ended approach of SGT (Charmaz, 2014). CGT accepts the perspective of the researcher as part of the process in order to interpret and co-construct reality (Bryant & Charmaz, 2019; Charmaz, 2014; Creswell & Poth, 2018). CGT considers data and analysis from the shared constructed interactions of the participant and researcher as part of the natural interplay (Bryant & Charmaz, 2019; Charmaz, 2014). CGT begins with collecting rich data. This is done using a semi-structured interviewing technique, field notes, conversations, reports, documents, observations, or personal interactions (Charmaz, 2014). Collecting rich data is an iterative process that involves constant comparison, data analysis, and data collection.

CGT recognizes that it is "people [who] construct data" (Charmaz, 2014, p. 29). CGT embraces context, complexity, and description. Data has a purpose that reaches an objective. The premise of CGT allows for the possibility that diverse meanings can appear. Theory is based on the viewpoint from which it is constructed. A constructivist researcher "treats research as a construction but acknowledges that it occurs under specific conditions—of which we may not be aware and which may not be of our choosing" (Charmaz, 2014, p. 13). More intuitive than other interpretive frameworks in qualitative research, CGT examines how meaning is constructed. Once this is determined, it begins to examine why (Charmaz, 2014). Critically examining interaction and context allows researchers to see how their life experiences, perspectives, biases, and belief systems sculpt their understanding of participants' world view interpretations explicitly and implicitly (Charmaz, 2014; Creswell & Poth, 2018). Charmaz (2014) posited that the perspective of the CGT researcher governs which facts they are able to discern, therefore reinforcing varying degrees of reflexivity for themselves and their participants. CGT was chosen for this study because of the acknowledgment of subjectivity and the researcher's participation in the construction and interpretation of the data with an inclusive perspective of the researcher's reflexivity about their actions and decisions (Charmaz, 2014). CGT is a methodology that generates theory by explaining the issues and enabling anyone to identify with the theory (Mills et al., 2006).

Coding. Constructivist grounded theorists begin to synthesize data early in the iterative process of discovery and analysis with coding. Coding is the formative crux of GT methodology but "coding is just *one* way of analyzing qualitative data, not *the* [only] way" (Saldaña, 2016, p. 3). Constructivist grounded theorists are informed by additional agencies such as subjectivity and the researcher's position in the construction and interpretation of data (Charmaz, 2014). Charmaz

(2014) stated that by knowing the data and closely analyzing the codes, the researcher begins to "learn which of these tensions raise methodological and theoretical questions and which suggest substantive areas and leads...to pursue" (p. 115). Coding processes are fluid with continuous reciprocal exchanges between analytic memo writing, data re-organization and integration, and a platform for analysis (Saldaña, 2016). CGT coding reflects "flexibility" that informs the researcher to "learn to tolerate ambiguity and become receptive to creating emergent categories and strategies" (Charmaz [2008] in Kenny & Fourie, 2015). Charmaz used initial and focused coding processes.

Initial Coding. Initial coding is an exercise in reflexivity for the researcher while dissembling, reviewing, comparing, visualizing, and categorizing the data (Corbin & Strauss, 1990). Initial coding is the first cycle of organizing and interpreting the data. Initial coding is an exploratory stage, and the initial codes are "provisional, comparative, and grounded in the data" (Charmaz, 2014, p. 117). The researcher should remain open-minded to spur new ideas. Charmaz (2014) advised using gerunds, or the noun form of a verb such as "describing versus description" (p. 120). This offers the researcher a feeling of action and sequence. Coding with action words will help prevent making a poor conceptual assumption before proper analysis has been done. Charmaz stated that "initial coding forms the link between collecting data and developing an emergent theory to understand and account for these data" (p. 343). The level of complexity of conceptual analysis increases after the initial coding. Comparisons were done with segments of the data and the conceptually similar are grouped together into categories. These categories then begin to explore theoretical sampling. The iterative process of constantly comparing overcomes potential issues with subjectivity and bias (Corbin & Strauss, 1990). Initial coding of data for this

study scrutinized data collected from the viewpoint of the mental health professional therapists (participants) and began the process of understanding what it all meant.

Focused Coding. Focused coding is the next stage of coding and the next level of abstraction in coding. The frequency of these codes is higher in the initial stage and carries more significance than other codes (Charmaz, 2014). The researcher needs to assess which initial codes make analytic sense for creating a category. This focus speeds up analysis considerably. Acquiring analytic concepts from the initial code helps the researcher move to the next stage of synthesizing, analyzing, and conceptualizing larger pieces of data. Charmaz's coding style was interpretive and intuitive with a sense of closeness in the interviewing process to encourage an intimate intuitiveness with the effect the participants experienced. The focused coding applied in this study depends on the meanings the researcher has given to the code. Depending on the richness of the data collected from this study, the focused coding looks for patterns in the initial codes, constantly compares codes, and examines codes that closely reflect the data.

Memo Writing. Memo writing is the core of GT. It is a fundamental analytical process that enables critical and creative thinking, promotes opportunity to analyze thoughts about codes or emerging categories, reflexivity, and connecting to the data. Memos keep track of processes, phenomena, and conceptual associations with categories. Birks and Mills (2015) identified that "memos are written records of a researcher's thinking during the process of undertaking a GT study...and they will transform into your GT findings" (p. 11). Memo writing plays a significant role with code notes or theoretical note taking and analytics. They pick up changes in analytic unfolding that would otherwise be missed. Memos are personal notes for the researcher to keep track of details and extraneous information that could supplement multiple details of the study and the research process. It is important to realize, "it is memo-writing that is the engine of

grounded theory, not coding" (as cited in Saldaña, 2016, p. 55). Memo writing was especially significant for this study as the researcher has a personal history with this research topic. The researcher has a heightened sense of interest in the study, connecting to the data, analyzing components, constructing categories as well as unconscious connections and questions posed by the researcher. A strong reflexive stance, together with ongoing insightful and thoughtful memo writing, was imperative to maintaining the trustworthiness of this study as well as integral to amplifying focused codes to conceptual categories.

Constant Comparative Analysis. Charmaz (2014) believed theory and data were constructed, not discovered. The involvement of the researcher is as important to the constant comparison method as it is the researcher that defined the analytic properties. CGT uses an iterative process of constant comparing during data analysis and data collection to organize analytic characteristics at every level of the research process. By comparing data with data, the researcher is looking for both similarities and differences. Constant comparison analysis involves data comparison of like data, sequential comparisons—earlier data compared with later data, new data compared with older data; it includes observations and researcher perspective (Charmaz, 2014). Charmaz believed the researcher should immerse themselves in the data as it is integral throughout coding (Mills et al., 2006). The CGT process is more intuitive, interpretive, and "weaves conceptualization into description" (Kenny & Fourie, 2015). This study enabled this researcher to be completely immersed in the data as an informed observer while constantly comparing data collection and analysis to interpret meaning that formed an analytic framework by comparing interview data with other interview data and comparing direct observations of interviewees.

CGT Outcomes. CGT is an interactive process that is flexible, fluid, interactive, and open-ended. The researcher is immersed into the study and the analysis shapes the conceptual content (Charmaz, 2014). Charmaz explains that analytic positions are formed from how the researcher interacts and interprets their comparisons and emerging analysis rather than some form of innate preset meaning in the data (Charmaz, 2014). The outcome of CGT is a reality constructed by the researcher and the participant that transforms knowledge (Charmaz, 2014).

Bias and Reflexivity. In order to ensure confidence in this researcher to uphold the trustworthiness of the study, it is important for this researcher to understand the threats to reliability and validity. This begins with accountability to support rigor through recognition of personal conscious bias, awareness that implicit bias may affect construction of outcomes, and then establishing strategies throughout the entire process of the study. It was my personal history with neurodiverse relationships that could challenge the "integrity of data, clear communication of the findings, and [the] balance between subjectivity and reflexivity" (Mitchell et al., 2018, p. 673).

In CGT, the researcher is an integrated part of the data collection, analysis process, and construction of substantive theory. The purpose of CGT is to allow the voices of the participants to be heard in the co-construction of knowledge, which means the researcher must be aware of the self as it affects the other (Charmaz, 2014). Charmaz (2014) stated that reflexivity is an important requirement for CGT and also noted that it is an iterative process, starting with acknowledging one's own biases in reflection, and revisiting biases as the study proceeds. Therefore, it was imperative I exercised transparency and reflexivity in all aspects of the study. Preventing bias from affecting the data can be managed through strategies such as critical self-reflection of preconceptions (such as reflexive writing about personal judgements toward

neurodiverse couples) and methodological journaling (such as reflexive writing about the proximity of myself to the study and the possibility of influencing analysis), and asking openended questions during the interview (Charmaz, 2014; Chenail, 2009; Galdas, 2017; Morse et al., 2002). With there being a potential for me to be blinded by my biases, together with novice interview skills, Chenail (2009) suggested "interviewing the investigator to help [me] assume the position of the participant [to] gain valuable perspective in what it feels like to be interviewed...and lead to more ethical and responsible research" (p. 20).

Being a practicing nurse exposes one to patients from many cultures and backgrounds that contribute to personal bias. I am aware of biases, and after decades of nursing, I am able to interpret implicit meanings that nurses have about practice irrespective of the area of practice. After years of working with nurses in several countries and from different cultures, I have seen implicit bias in nursing practice. Active self-perception in my practice has helped me become consciously mindful of my biases which led to my master's thesis in implicit bias in nursing practice.

My exposure to neurodiverse relationships came unwittingly and over time. These experiences with neurodiverse couples motivated me to pursue my research in this area. I helped elderly individuals navigate the healthcare system. When I learned one of my clients was an autistic adult, I realized they had great anxiety and difficulty navigating the healthcare goliath, and I would go to appointments with them to help them understand what was happening. I have advocated for neurodiverse couples in healthcare and in seeking counseling. I realized therapy did not help and at times the neurodiverse couple left a therapy session more conflicted. These, and many more experiences sat in my mind as I realized neurodiverse couples carried a heavy burden and found myself, at times, unable to articulate a clear purpose of my research (such as

finding successful outcomes for neurodiverse couples). I needed to always be aware that I must bracket or put personal experiences aside for this study and concentrate on my ultimate purpose. I was strongly driven to focus on my research. I used reflection and discussion with my methods mentor throughout this study for a solid strategy to help my focus.

The means of upholding trustworthiness are the use of tools such as field notes, reflexive note taking, memo writing, and mentor supervision (Finlay, 2012). These tools were implemented and were instrumental to help bring my unconscious bias to the awareness of myself through mentor and research committee feedback. Strong reflexive note writing brought attention to pattern recognition and misjudgments of patterns that originated from the need to make connections, and by asking questions such as "What am I trying to do? Why am I carrying out the interview this way? How is my approach affecting the research?" (Buetow, 2019; Finlay, 2012, p. 317). I planned to follow the suggestion of doing mock interviews with me as participant and me as researcher/interviewer. I reviewed early transcripts and recordings with my methods mentor. When unconscious bias was brought to my attention through any means, I challenged how my assumptions were influencing my judgement. Clearly and openly demonstrating reflexivity through memo writing; field notes; actively and frequently seeking peer support through mentorship and guidance; practice interview sessions with the dissertation committee members; and honest self-scrutiny to be cognizant of my thoughts and position, was instrumental in identifying and controlling for bias. These strategies assisted me to avoid bias that could affect the overall results and prevent the voices of the participants being lost during this important study to discover how therapists counsel neurodiverse couples.

Study Method

This novel study explored how mental health professionals provide therapy to neurodiverse couples and what, if any, principles guide the mental health professional to characterize the experience of each neurologically unique partner in the neurodiverse relationship. The paucity of previous studies or limited sources of data made the CGT approach the best method for inductive theory construction. The study foci were on social processes and social interactions that explained the behaviors of mental health professionals who develop counseling with no professional guidelines for neurodiverse couples. GT was the most adept methodology for this study (Charmaz, 2014). Charmaz's constructivist model includes an epistemological position that aligns the research questions with the acknowledgment of "subjectivity and the researcher's involvement in the construction and interpretation of data..." (Charmaz, 2014, p. 14) with an ontological position of concepts relative to the context (Mills et al., 2006).

Ethical Considerations

This research proposal was submitted to the Washington State University (WSU) Institutional Review Board (IRB) for approval prior to recruiting any participants eligible for this study. WSU's IRB is charged with "protecting the rights and welfare of human subjects to ensure that all are treated physically, psychologically and socially in a such a way as to minimize embarrassment and stress, and to avoid harm or other negative effects in compliance with the federal, state and university regulations" (WSU, 2020). Every precaution was taken to ensure the privacy of the participants. All research procedures were explained to the participant. An informed consent form was given to each participant which also included consent for Zoom recording. Potential concerns included privacy issues or possible psychological distress. Zoom

recording and transcripts were de-identified and labeled with pseudo-names. Consent forms and demographic information were stored on a password secured OneDrive that was strictly access only for committee members. Participation was voluntary and the participant was free to stop the interview process or withdraw at any time without retribution. No compensation was offered for participating in this study.

Setting

The setting for this study was chosen by each participant. Zoom meetings were set up at pre-determined times convenient for the specific participant. No interviews were conducted face-to-face. All interviews were 60–90 minutes.

Participant Recruitment

This study explored the social process(es) mental health nurse practitioners and other mental health therapists use to provide therapy to neurodiverse couples. A purposive sample of 10–20 certified mental health professionals was sought at the beginning of the study. Participants were selected based on the specific characteristics of specializing in providing therapy to neurodiverse couples. This study prioritized mental health nurse practitioners and considered other therapists who had accredited credentials and were located in any state or territory of the United States, Canada, and Australia. The timeline for recruitment for this study was January 2021 until theoretical saturation occurred. Recruitment was done using various resources. Research study information and participation requests via e-flyers were posted on professional resource websites. Study recruitment e-flyers were posted on therapy sites including autism websites and the Asperger/Autism Network. If participation fell below the required sample size, or if participants dropped out of the study before their interview was conducted, a contingency plan considered snowball sampling. A last consideration was to reach out to a convenience

sample of certified therapists who advertised on the internet and specialized in neurodiverse relationship therapy.

Inclusion Criteria

The mental health professional had to be a credentialed, licensed, and registered therapist who specializes in diverse neurologies. Mental health professionals, marriage and family therapists, psychotherapists, doctoral-level psychologists, mental health nurse practitioners, counselors, and social workers who specifically provide therapy to adults in neurodiverse relationships were included in the study. A psychotherapist educated with a degree has longer and more in-depth training in human psychology than a certified counselor. A psychotherapist has training to deal with root psychopathology. At present no guidelines for neurodiverse therapy could be located by this researcher.

The mental health professional had to speak English; be in any state or territory in the United States, Canada, or Australia; work with adults; and have an educational degree in nursing, psychology, counseling, social work, or marriage and family therapy that provided specific training in human behavior and mental processes of human beings. The English-speaking requirement was essential, or the researcher could not communicate effectively with the therapist or note nuances during the interview process. Since the study focus was about providing therapy for intimate neurodiverse relationships, the mental health professional had to be an adult therapist. The educational degree had to be related to human psychology. The mental health professional had to be actively practicing to participate in this study.

Exclusion Criteria

Individuals who were unable to participate in a Zoom or phone meeting were excluded.

Mental health professionals who work primarily with children or teens were excluded. Novice

mental health professionals who had been practicing for less than one year were also excluded. The mental health therapist practicing for less than one year does not have the practice experience or knowledge experience to offer insight into developing therapy for counseling neurodiverse relationships as there are currently no established guidelines for neurodiverse relationship therapy.

Data Collection

This study explored social process(es) mental health nurse practitioners and other mental health therapists use to generate, develop, and provide therapy for neurodiverse couples. During the global pandemic, face-to-face interviews were not possible. Interaction with all participants was done completely through a Zoom meeting format, either with video or phone. Contact was made using a WSU email address. A full description of the research study e-flyer (Appendix A) was emailed to the participant. After participant approval, a WSU College of Nursing research study participation agreement (Appendix B) was emailed to every participant. A date and time for the interview was determined based on the convenience of the participant. A semi-structured interview was conducted using the Zoom meeting format. Before recording of the formal interview began, the researcher explained the purpose of the study and asked if the participant had any questions. Once questions were answered, recording began, and the researcher re-read the research study participation agreement to the participant and received verbal acknowledgement after each point. Participants were asked demographic data questions (Appendix C) before the interview began. A semi-structured interview was conducted within a 60–90-minute time frame. A preview of the initial interview guide (Appendix D) that outlined the context of the study (Charmaz, 2014) began the interview process. The purpose of the interview guide was to augment the interview if narratives needed prompting, or pivotal issues

were not being explored (Charmaz, 2014). Interview questions were purposeful, constructed, and evolved based on the responses of the participant. The researcher was cognizant of documenting thoughts and experiences through ongoing field notes. The Zoom meeting was recorded, and deidentified transcripts were extracted from the interview. Pseudonyms were attached to each transcript, and the identity of each participant was not acknowledged. The data was stored on a password-protected WSU OneDrive site where only the committee members had access. Any document with identifiable participant information was stored in a locked file in the researcher's office. The computer the researcher used for data was on an isolated system and specifically monitored 24 hours every day by an independent computer security company. After the interview was completed and the Zoom meeting ended, the researcher sent a thank-you note to the participant for lending their time on behalf of the researcher and WSU College of Nursing.

Data Analysis

The data was analyzed using an iterative process of coding, constant comparison, and data collection. Constructivist grounded theorists understand that it is people who construct data. According to CGT methodology, data is generated from interviews, researcher observations, researcher experiences, personal interactions, participant interplay, fieldnotes, documents, memo writing, sensitizing concepts, and anything else that provides relevance. Data collection was an ongoing process. The researcher took the data from the interviews, field notes, and memo writing and began initial coding. Coding is simply breaking the data into small pieces and giving it a name. Charmaz (2014) described using a line-by-line process for initial coding using *gerunds* which are action words with an -ing ending.

Rigor

Rigor in research is imperative to maintain a measure of scientific integrity. It is the precision, exactness, accuracy, or thoroughness within the study that gives it veracity. Rigor is grounded in theory construction from data analysis and a constant comparison process and is contingent upon the degree of credibility, plausibility, and trustworthiness (Jeon, 2004). Integrating reflexivity and effective researcher—participant interactions and trust affects rigor. Trustworthiness reflects the integrity, authenticity, and quality of the results.

Criteria for evaluating qualitative research can vary depending on the method being assessed. Inherent within the conceptual framework of constructivist grounded theory was a "systematic method of conducting research that shapes collecting data and provides explicit strategies for analyzing them" (Charmaz, 2020). There are many elements and strategies of CGT such as memo writing and reflexivity that maintain the integrity of CGT and augment rigor. Charmaz (2020) offered four criteria for evaluating constructivist grounded study that consider not only the scientific application but also the creative side of qualitative research (Corbin & Strauss, 2015) These categories include: credibility, originality, resonance, and usefulness. Essentially, these categories are important tools to demonstrate the quality of the research and the research process.

Rigor in research involves more than just the mechanics of the study. Corbin and Strauss (2015) described involving the reader in the process by offering clear descriptions so the reader cand judge the data for themselves and see how the researcher reached their resolution.

Comparison groups are important for rigor, as is the specificity of the data that is used for extrapolating meaning.

Credibility

This study needed to have enough data for the researcher to ask intelligently analytical and clear-thinking questions about the data, the researcher's own description of the phenomena (Chiovitti & Piran, 2003), exercised expertise, knowledge, and research skills (Tie et al., 2019). In this study, the researcher did constant comparisons for the duration of the process and to establish a focused analysis. The researcher had personal history associated with this study; to demonstrate credibility it was important to be deeply self-aware, analyze personal assumptions and bias, and practice strong reflexivity through the duration of the study. Credibility is associated with the feeling of trustworthiness of the findings (Chiovitti & Piran, 2003), therefore this researcher practiced introspection and personal scrutiny. Credibility was achieved through engagement in the field documented from field notes and memos and through continual comparisons of data so that the reader can form an assessment that agrees with the findings. This study demonstrated collaborative efforts between the participants and the researcher to guide the process, by using the participants' words in the theory and strong researcher reflexivity by becoming cognizant of assumptions and incorporating "methodological self-consciousness" (Charmaz [2017] in Charmaz & Thornberg, 2020, p. 12) of intuitive beliefs that possibly could enter the research process. Credibility is demonstrated when precise questions are queried from the data and an exhaustive analysis to persuade the audience is established. Credibility is constructed through the reflection of the reality of the participants (Maher et al., 2018). This study revised the interview guide as necessary, gathered data through multiple sources, and incorporated the reality of the participants to accurately reflect the context of the phenomena and thus, maintain credibility.

Originality

The quality of a CGT study can be reflected in the researcher's ingenuity, creativeness, inspiring personal and scientific insights, and competent analysis skills. Quality is reflected with methodological conformance with the research question (Tie et al., 2019). Originality is created when the reader is presented with a new understanding of an old problem with the support of compelling analysis. This is a novel study providing insight into the dynamics of neurodiverse relationships that is not currently found in the literature. The originality of this study supports the rigor of CGT.

Resonance

Quality is mirrored through the researchers' data-interpretation proficiency for concept construction, participant expression, and procedural precision in the use of methods. In other words, for resonance to demonstrate quality of the study, the researcher must compose concepts that reflect the experience of the participants, but it must also *resonate* or echo intuitive awareness to other readers. For instance, the substantive theory constructed from this study will offer rich, broad insight that resonates with therapists, autistic adults, their neurotypical partners, family members, and families with autistic children, as well as nurses and other healthcare professionals who provide care to patients who are neurotypical or autistic.

Usefulness

Quality is exemplified with usefulness through the researcher's intuitive insight and articulation of their participants' experience, creation of thoughtful and intentional protocols for future exploration, and the recognition of universal practices. Again, the study must inform a balance of value and, generally, it must be useful. The researcher incorporates the participant's understanding in a manner that *connects* with the reader. A study must have future implications

to be useful. This study provides future implications for neurodiverse couples who seek therapy; for future therapists developing guidelines for providing therapy to neurodiverse couples; and to healthcare professionals who provide care to patients with autism.

Limitations

Limitations may have arisen from the participants themselves who may have been unable or unwilling to articulate some of their experiences. Nonverbal information may have been missed because in-person interviews were not possible. There were no apparent limitations to participation input by gender. Participants were both male and female. Participants identified as neurodivergent, but no participant identified as LGBTQ. Snowball sampling was used. No technology limitations happened with any of the prescheduled interviews. Rescheduling or telephone interviewing was not needed as a backup method.

Implications

Exploring how mental health professionals provide therapy to neurodiverse couples offered insight into the social processes therapists use to provide counseling. This led to awareness of the psychological care and wellbeing of each partner in a neurodiverse relationship. The peripheral implications for nurses in healthcare involve the future impact nurses can have on their neurodiverse patient population. Information derived from this study can lead to nursing practice refinement; establishing nursing guidelines for assessment of neurodiverse patients; creating practice guidelines to educate all nurses to identify adults with autism who may not be diagnosed; promoting autism awareness courses in nursing schools; establishing a nursing advocacy program specifically to assist neurodiverse patients and their families; as well as an autism-informed nurse mentor to advise multidisciplinary teams working with neurodiverse families in the healthcare setting.

Summary

GT has evolved considerably since its inception over 50 years ago. GT continues to be a very effective methodology for theory generation of qualitative research. There are variations in GT based on the philosophical or theoretical perspectives that inform each tradition. GT provides a systematic and detailed method of data collection, constant comparative analysis, and ultimately, theory generation, however daunting, difficult, and complex a process it may be for the novice researcher to master. This was overcome in this study with the guidance of an experienced and knowledgeable methodology mentor, research committee members, researcher reflexivity, constant memo writing, and a tenacious determination to master the process.

CGT was the optimal method to construct theory for this study. The iterative process inherent in the GT method is a long, complex process that evolvescodes, identifies concepts, and develops core categories for a theory(s) to emerge. The veracity of the study was measured through reflexive integrity, credibility, originality, resonance, and usefulness. Thorough, transparent, and ongoing researcher reflexive writing, along with mentor guidance to strict adherence to methodology, analysis, interpretation, and results reduced uncertainty and supported the scientific rigor of the study. CGT allowed for co-construction of the data between the researcher and participants to discover and explore how meanings were formed, why actions were taken, and the social conditions that influenced them. This CGT approach was the best method to answer this research question because it develops theory where no theories previously existed, and its epistemological stance opens the door for researcher and participant involvement in the understanding, interpretation, and construction of the data. We construct our own reality and in the words of Kathy Charmaz, "subjectivity is inseparable from social existence" (Charmaz, 2014, p. 14).

CHAPTER FOUR: PRESENTATION OF FINDINGS

The purpose of this study was to explore the social process mental health professionals use to assess, generate, develop, and ultimately provide therapy for adult neurodiverse couples. The theoretical framework of Charmaz's constructivist grounded theory engaged the combined synergy from the researcher and participant in a collective and dynamic co-construction of theoretical knowledge. The study was undertaken because of a paucity of research in the literature on counseling neurodiverse couples.

This study identified a core social process of *Speaking Autism* as the overarching tenet embraced by mental health professionals that guides their practice. *Speaking Autism* will be described in more detail later in this chapter. From an iterative process of data analysis through conceptualizing; constant comparison; memo writing; and sorting similarities, differences, patterns, and connections from multiple data points, emerged a social process therapists employ to counsel neurodiverse couples. This social process consists of two pathways, *My Process* and *Trust the Process*, that weave through three key categories: *belief system*, *training (explicit actions)*, and *communication*. These categories underpin the core category of *Speaking Autism*. Each pathway leads to *Speaking Autism*. This chapter presents an overview of participant demographics and data collection followed by data analysis that segues to the development of the core social process of *Speaking Autism*.

Demographic Data

Participants were recruited using three methods. A research study participation flyer was posted on the Asperger/Autism Network (aane.org) research studies page at two time points.

Word-of-mouth and snowball sampling contributed qualified individuals interested in

participating in this study. An internet website search for mental health professionals who counsel neurodiverse couples was used to reach out to potential participants. Overall, fifteen individuals expressed interest to participate. One person did not meet the inclusion criteria; three participants who expressed interest did not attend their pre-arranged Zoom interview and did not respond to requests to reschedule; and one person dropped out of participating due to scheduling issues. In total, five individuals were excluded from participating in the study. One hundred percent of the participants (n=10) who were interviewed mentioned feeling the importance and value of this study as articulated by Participant 8: "I'm really realizing [after working with autistic people] I like what you're doing, there's so little [information] out there". Participants who met inclusion criteria were interviewed between May 2021 to January 2023. The bulk of interviews were completed by November 2022, but due to scheduling conflicts, two participants did not have availability for interviews until January 2023.

Mental health professionals from three countries contributed to this study (see Table 2). Seven women and three men were recruited with ages ranging from 29 to 69 years old with a median age of 46.5 years. Many of the participants (n=7) identified with a wide range of ethnic heritages including eastern European, Jewish, East Indian, Israeli, Romanian, French, German, and Hispanic. Most (n=9) identified with a heterosexual orientation. Cultural heritage and sexual orientation reflected broad intrapersonal parallels to which counselors are attuned. This context within counselor–couple therapy incorporates interpersonal interactions that were influenced by implicit bias; counselor/couple internalized perceptions that affected outcomes; or behaviors that impacted social justice (Boysen, 2011; Hays, 2020; Israelstam, 2022; McCabe & Rubinson, 2019). Highest level of education included master's degrees (n=6), a PhD (n=3), and a PsyD (n=1). Even though this aspect was not considered, nor explored, some participants (n=3)

suggested a strong Christian-faith-based belief system they drew from for guidance. One person shared their meditation and Buddhist observance to keep the energy positive for themselves and their clients. Some worked part time (n=6), and others had a full-time work schedule (n=4). Participants worked from home (n=6), from an office (n=2), or alternated between both environments (n=2). Practice-years of counseling neurodiverse couples ranged between 1 and 25 years. Most participants did not take insurance and required self-pay (n=8) from their clients with charges ranging between \$250 and \$450 per 1-hour session. Most participants (n=9) shared having an immediate connection or history of personal experience with autism or neurodevelopmental disorders (self, family member, dating) prior to their work as a therapist offering counseling to neurodiverse couples. One participant in the personal history group did not have a direct personal connection with autism, however they felt a deep, intuitive connection with the nuanced struggles of autistic people because of limitations from their own disability. Many (n=7) have developed for-profit courses to train other professionals about neurodiverse couples therapy with fees that range up to \$1,500 per course.

Table 2Participant Demographic Data

	Age	Gender	Sexual orientation	Ethnicity	Highest education	Practice years	Professional specialty	Years of therapy to neurodiverse couples	Experience with neuro-develop. disorders	Licensed in US	Credentials	Geographical origin
Participant 1	60	F	Not stated	Jewish/ Eastern European	2 Master's degrees	20	Neurodiverse couples	20	Group sessions	Y	LMSW-c	Maryland
Participant 2	42	F	Hetero- sexual	East Indian	Master's degree	10	Autism/Asperg er's ADHD adult couples	10	Works only with neurodiverse couples	Y	LMHC	Massachusetts
Participant 3	60	M	Hetero- sexual	Part Israel/Part Dutch	PsyD	22	Neurodiversity	22	Treat neurodiverse symptoms	Y	Psychologist	California
Participant 4	55	M	Hetero- sexual	Caucasian	PhD	15	Neurodiversity	5		Y	PhD; Licensed marriage and family therapist	California
Participant 5	69	M	Hetero- sexual	Caucasian	PhD	50	Autism ND relationships	25	Research, all aspects of autism	N	PhD; Psychologist	Australia
Participant 6	44	F	Hetero- sexual	Eastern European	Master's degree	17	ND individuals & couples	3	Autism levels 1 & 2, anxiety, depression, ADHD, OCD, PTSD, sensory processing disorders	Y	LCPC, National Board Certified	Illinois
Participant 7	29	F	Hetero- sexual	Romanian German	Master's degree	4	Marriage/ family therapy (emotional-	1	Community mental health,	Y	LMFT	Arizona

	Age	Gender	Sexual orientation	Ethnicity	Highest education	Practice years	Professional specialty	Years of therapy to neurodiverse couples	Experience with neuro-develop. disorders	Licensed in US	Credentials	Geographical origin
							focused therapy)		ADHD, autism			
Participant 8	40	F	Hetero- sexual	White, non- Hispanic	Master's degree	9	ND couples	1+	Adult autism	Y	MA in Divinity LMFT	Indianapolis
Participant 9	40	F	Hetero- sexual	Hispanic	Master's degree	13	Christian sex therapy, ND couples	5–6years	Neurodiverg ent, ADHD, sensory processing disorder, gifted, gifted children, autistic, PANS	Y	MA in Christian sex therapy, LMFT	Georgia
Participant 10	49	F	Hetero- sexual	French Canadian	PhD	15	Sexology specializing in sexuality in autism and Asperger's syndrome	15	Specialize in autism and gender identity disorder, Asperger's intellectual disability, ADHD	N	MA in Sexology, PhD psychology, sexuality in autism/Aspe rger	Canada

Ethical Considerations

This study was conducted in accordance with the WSU Human Research Protection

Program and met the criteria for research eligible for exemption. Anonymity was secured by the deletion of identifying personal information from the written transcript followed by the destruction of the original recordings. Data was collected on a password-protected computer and stored on a password-protected WSU OneDrive site accessible to committee members. An independent IT security company monitored the password-protected computer 24 hours every day. Each participant was given written acknowledgment that was verbally reiterated that they would not directly benefit from participating in this study and could withdraw from participation at any time. None of the participants withdrew from the study.

Data Collection

Kathy Charmaz merged the theoretical perspective of SI with the epistemology of constructivism to a GT framework and forged a paradigm shift that "acknowledge[d] subjectivity and the researcher's involvement in the construction and interpretation of data" (Charmaz, 2014, p. 14). Data collection and constant comparative analysis are continuous cyclical processes that begin with the first semi-structured interview (Charmaz, 2014). The data collection began from the first moment of visual contact with the participant. The researcher began with observing and memo writing body language, verbal, and nonverbal mannerisms, patterns of speech or silence, listening to content and context, inflections, and cadence while also documenting personal impressions, thoughts, and observing what was not being said (Charmaz, 2014).

Prior to the pre-arranged interview meeting, a Research Study Participation Agreement and Recruitment e-flyer were emailed to each participant (see Appendix A). An open invitation

for the researcher to answer any questions was offered within the context of the email. At the beginning of each interview meeting, the researcher re-read each point from the Research Study Participation Agreement and received verbal acknowledgement after each point (see Appendix B). The researcher finished the pre-interview preamble with a Demographic Data Form (see Appendix C). At this point, the researcher proceeded into the interviewing interplay.

A semi-structured interview usually lasted between 60 and 90 minutes. The interview was video recorded and transcribed on Zoom. One participant preferred a phone interview, which was audio recorded and transcribed by Zoom. After the interviews concluded, the researcher compared video recordings to the transcripts to clarify or correct errors found in the transcript recording. Once the researcher verified anonymity and accuracy of the recorded transcription, the video and audio recordings were deleted.

The semi-structured interview questions were designed using CGT objectives for interviewing: to be conscientious of your participant's story and to construct theory (Charmaz, 2014). The interviews began with "warm-up" questions, continued to questions that explored the overarching aim, then progressed to deeper probing of the research question (see Appendix D). The overarching aim was to explore: *How do mental health professionals counsel neurodiverse couples?* More focused interview probing explored the research question: *What social process(es) do the mental health professionals use to generate, develop, and provide therapy to neurodiverse couples?* In two interviews, the researcher allowed the participants to speak at will for nearly the entire 90 minutes with few prompts for clarification. Other interviews presented as guided conversations. Charmaz (2014) encourages the researcher to allow the "participant [to] set the tone and pace" of the interview (p. 63).

Data Analysis

Initial Coding

Data analysis used a CGT approach that oscillated between constant comparison, memo writing, theoretical sampling, and coding (Charmaz, 2014). Interpretation of data and memo writing were actively employed from the first interview. Throughout the comparative analysis cycle, data coding began to take shape with groups of concepts that reflected descriptive similarities and differences. The researcher memo wrote in vivo codes that echoed clustered data of shared commonalities voiced by other participants. *In vivo* is a Latin word meaning "in a living thing" (Oxford University Press, 2003). In vivo codes capture a participant's words directly and express a personal perspective that embodies implicit meaning from their point of view (Charmaz, 2014). An in vivo code was extracted from an interview with Participant 2 when they shared, "I grew up bilingual." Memos, re-reading interviews, and constant comparing of data guided the researcher to discern that Participant 2 was voicing how they believed they earnestly understood their autistic clients and could easily and fluently "speak" in both ASD and neurotypical neurological "languages." Several participants expressed a similar sentiment; they believed they could *Speak Autism*.

The researcher's immersion into the data was augmented by memos that noted what was being said, and *not* being said. Examining content with context; asking *what is happening here*; and making notes of patterns, themes, processes, behaviors, actions, and topics that seemed to emerge from the data, was the first step to start conceptualizing the data (Charmaz, 2014). Coding with gerunds was the initial phase of coding. This technique effectively helped conceptualize ideas by operationalizing *actions* seen in the emerging data (Chametsky, 2016). Gerunds are the verb form of nouns that portray action and "[help] to define implicit meanings

and actions, [give] researchers directions to explore, [spur] making comparisons between data, and [suggest] emergent links between processes in the data to pursue and check" (Charmaz, 2014, p. 121). For example, initial coding from the interview with Participant 1 brought forth a gerund code of "acting as an interpreter," "interpreting." Memo writing indicated this was what the participant felt was their role with neurodiverse couples who were having different conversations with each other. Memos reflected this participant was passionate about helping neurodiverse couples. They shared an uninhibited story about their journey, their approach to counseling neurodiverse couples, and their hope for the future. The researcher wrote down memos containing thoughts about this participant's goal of short-term coaching while acting as an interpreter for couples who had lifelong neurological differences. This opened the door for deeper exploration into this code.

Gerunds are a significant part of initial data collection and interpretation. Gerund coding stays close to the data by focusing on capturing actions in the data by shifting nouns into verbs (Charmaz, 2014). Charmaz (2014) identified this as important to help facilitate the researcher to "discern implicit connections" (p. 124). In vivo codes gained increasing significance as the researcher observed emerging concepts. Patterns became appreciable with each round of comparing codes to codes, codes to concepts, and concepts to concepts (Charmaz, 2014).

Constant memo writing helped to network the data, connect codes, and form concepts. Huge 15-inch×15-inch sticky notes eventually replaced the gridlines as directional flow of data started to take form.

Data was broken into pieces where codes were compared with codes from each interview as they were completed. The researcher met regularly with their dissertation chair, Dr. Oneal, who was well versed in GT, to review and receive coaching on coding and interview questions.

In the beginning, initial coding for each interview was color coded and outlined on a grid that included memos. Each code grid was constantly compared to all interviews as they were completed and coded. The research question was written at the top of each grid page as a focal reminder during the initial coding phase. This grid system was used for all interviews (see Table 3).

Table 3

Example of Initial Coding Grid

RQ: How do Mental Health Practitioners Counsel Neurodiverse Couples? Interview #1							
I had a client who stumped me and stumped my supervisors. I had a friend who had a daughter on the spectrum, and she was also a social worker, and I asked her if she thought that this student may have been on the spectrum. And we talked about it.	Feeling puzzled/stumped Inquiring/learning, knowledge gap Collaborating with colleagues	Why did they suspect autism? (Why choose the friend with an ASD child?) Are there implied assumptions here?					
So, I asked her, you know basically when I presented the case to her, she did think that the woman was on the spectrum and I said, what should I know as a college clinician? And to answer that question, she said why don't you come to my group for adults on the spectrum and ask them directly what they think, you know, would have been helpful for them if a college counselor had known, so I came to her group	Collaborating with colleagues confirming Inquiring, learning, recognizing knowledge deficit. Engaging Inquiring, learning from participants. Engaging with participant; proactive learning	Remind myself to think about what is the process? She is asking, "what should I know?" Where would you go to get this information? Are schools teaching counselors about adult autism? Are there any resources available for adults? Family? Figuring it out. Making a real connection.					
I learned so much from them she kept inviting me back. They kept inviting me back she ultimately said why don't you co-lead the next group with me.	Acquiring knowledge Developing relationships; learning by doing Growing trust; colleagues recognizing growing competence?						

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RQ: How do Mental Health Practitioners Counsel Neurodiverse Couples? Interview #1 Codes Memo Interview So, I co-led a group for adults on the Leading therapy group Did the "internship" learning by doing give her enough experience, tools to competently educate spectrum. others? Symbolic interaction-constructing reality through interaction What is the process for transitioning from learning to leading? I feel like the greatest strength is really *acting* Her goal with couples counseling is short-term, but Acting as an interpreter; interpreting (in vivo) as an interpreter, being able to say, from a the neurological differences are permanent, lifeneurological perspective, this person over here long. What is the "bigger picture?" How does this is looking at the big picture, not the details, play out? Is this a task-oriented approach? Or is this person's looking at the details, there a process going on here, like interpreting for specifically and literally, therefore you're the deaf? Or interpreting language? Meaning? having two very different conversations.

Diverging Practitioners

Memos reflected tone and a "reflexive posture" the researcher engaged to gain selfawareness and bring attention to implicit bias and assumptions that potentially could influence the research process. Charmaz (2014) acknowledged reflexivity brings the researcher "into the process [and] inform[s] how the researcher ...relates to the research participants and represents them" (p. 344). Participant 3 was interviewed and became distracted several minutes into the interview. The participant talked randomly about something completely unrelated to the interview topic. Memo notes reflected the researcher feeling uncomfortable with this sudden and random shift of behavior and asked the question: Why is this making me uncomfortable? Memos disclosed the researcher wondered if this participant may be on the spectrum or have some other co-existing condition. The researcher pondered if other mental health practitioners who counsel neurodiverse couples may be on the spectrum? Although this detail was not within the scope of this study, the researcher wondered if the social processes used by a mental health practitioner with ASD would be similar to social processes used by mental health practitioners who do not have ASD? After several minutes, the participant re-engaged with the interviewer. The researcher noted a shift with the participant's responses. It was asked whether something had provoked a change in the participant's disposition. Participant 3 described a partner as being "demonize[d]" (line 70). A question about the management of clients with rigidity of thought during therapy brought the response, "I'm persuasive." The researcher found some comments unexpected from a professional licensed therapist. The researcher discussed this with Dr. Oneal who also noted some irregularities. Memos gave this researcher pause to explore deeper into the intentions and motivations of mental health practitioners who counsel neurodiverse couples. To gain deeper insight, a theoretical sampling of the literature was conducted to see if there were

social or psychological underpinnings that might explain the behavior. A literature search on therapists who identify on the spectrum was another search conducted. In both cases, there was a scarcity of literature.

Initial coding introduced 41 elemental codes and 13 in vivo codes that were merged into broader categories as the researcher remained attentive to emerging patterns (Charmaz, 2014). The iterative and interactive aspect of collecting data, memo writing, and constantly comparing provided the researcher with a process to discover what emerged from the data. The researcher gave meaning to data they deemed compelling as they built constructs using initial codes (Charmaz, 2014). This process evolved to synthesize greater amounts of data that was organized into larger sections by analogous association. The researcher clustered codes that made "the most analytic sense" into categories (Charmaz, 2014, p. 138).

Focused Coding

Focused coding was the next level of synthesizing the data. While the initial codes captured simple descriptive impressions, identified actions (rather than themes), and were directly drawn from the data, focus coding supported a deeper conceptual scheme that categorized larger portions of data (Charmaz, 2014). Focus codes group data from initial codes that have patterns, themes, ideas, or salient significance (Charmaz, 2014). For example, one pattern of conceptual codes that synthesized into the focused code *barriers to therapy* included "lacking self-understanding," "lacking resources," "lacking knowledge of ASD," "co-morbid issues," "rigid thinking," arrogant/narcissistic behaviors," and "motivating/engaging." With increasing abstraction from comparing codes and concepts emerged a focused code: *barriers to therapy*. Subcodes emerged from the data that included: *differentiating the disorder* and *processing*. The subcode, *differentiating the disorder*, captured how behavior can be mislabeled

or misunderstood and create a barrier to therapy for some mental health professionals but not others. Memo writing reflected the researcher asking: "What defines a barrier?" "Why is a particular subcategory a barrier for one mental health practitioner but not another?" "What is the process used by the participants to recognize these barriers?" The literature was explored for sensitizing concepts, co-occurring disorders and autism, and counselors' perceived barriers to therapy. The subcode *processing* reflected therapists espousing they found no barriers to therapy, or that "rigid thinking" was a barrier. There was a duality of meaning for "rigid thinking." Even though it was coded as a barrier, it was also understood to be part of the autism condition by some mental health professionals and needed to be integrated into the therapeutic plan.

Another focused code was defining therapeutic techniques which reflected therapeutic strategies used by participants for counseling neurodiverse couples. Initial codes were originally associated into two groupings: "effective therapeutic techniques" and "not effective therapeutic techniques." Each group was further synthesized into bundled therapeutic techniques and were consistently inconsistent between the participants and the pathways. The researcher's memos questioned the process participants used, if any, to determine their therapeutic approach. What overarching influences guided the participant and their therapy choices? The range of therapeutic technique subcategories was significant and stood out. Memo writing examined possible common threads. The researcher compared codes in interviews from participants with similar and different therapeutic approaches. The literature was examined for therapeutic approaches to different dyads including autistic individuals and neurotypical couples, communication as a means of informing therapy, and protocols for different counseling modalities.

Conceptual Framework

The purpose of this study was to understand the social processes mental health professionals use to assess, generate, develop, and ultimately provide counseling for adult neurodiverse couples. This theoretical framework represented how mental health professionals counsel neurodiverse couples. The model is a fluid process that was grounded by a philosophical underpinning of epistemology. Therapists are guided by personal truths to which they subscribed. These epistemic points of view, conscious, and unconscious, source the actions of the therapist. Personal epistemology affected therapeutic practice by informing implicit actions of what's not being said. This was a contextual construct that augmented concepts within three categories: belief system, training (explicit actions), and communication. These concepts merged and diverged within these categories and formed a directional flow. This reciprocal and fluid process bifurcated into one of two pathways: My Process of Speaking Autism, and Trust the Process of Speaking Autism. Each pathway was similar; the divergence came from how constructs were executed by each pathway (see Figure 1). Constant comparing and reading of memos enabled the pathways to take form and emerge from the categories.

My Process was a pathway that patterned a self-guided schema not correlated to profession guidelines or research-derived techniques for neurodiverse couples. While there was a paucity of research in the literature exploring effective neurodiverse therapeutic techniques, the therapeutic approaches used in the My Process pathway were driven by personal attestations of truths derived from lived experiences with the self or previous encounters with people with autism or other neurodevelopmental disorders. Insight into the My Process pathway was seen in comments made by Participant 9 who, when asked about their [counseling] experience with neurodevelopmental disorders replied, "I am gifted, I am ADHD, I am neurodivergent, I have

sensory processing disorder and I have children who are multi-exceptional" (line 125). Participant 9 added, when asked what they had incorporated into their practice, "I'm incorporating the lens of brain informed care which means all [humans] experience the world on a sensory level. I approach the therapy room with that understanding, that two people experience life fundamentally different than two people who are neurotypical" (lines 308, 320). This participant had experiential insight into neurodevelopmental disorders and created a therapeutic blueprint "with that understanding" (line 320).

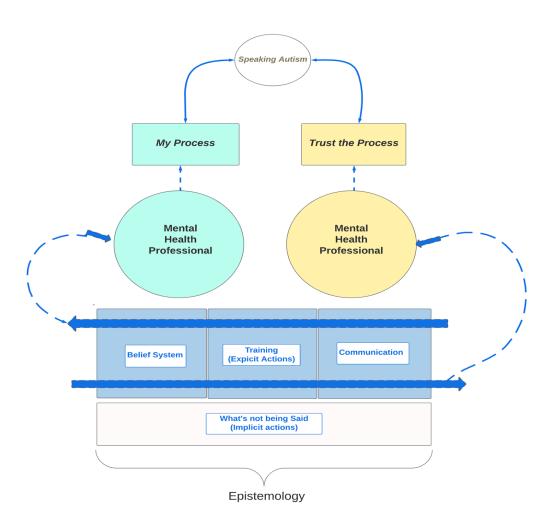
The commitments to help neurodiverse couples were equally passionate from participants, while participants who adhered to the *Trust the Process* pathway subscribed to a functionally different approach to developing therapy for the neurodiverse couple. The basic tenets within *Trust the Process* came from consideration of research as a foundational building block of therapeutic methods specifically geared toward the specialized needs of neurodiverse couples. This pathway employed evidence-based processes, professional collaboration, and academic mentorship to a greater degree than reliance on past or personal experiences as a source of guidance. When one participant was asked about the process they used for the couple who "walks in the door," they stated, "we will proceed with a formal diagnostic assessment because I need to know their profile, then I will assess their needs" (Participant 10, lines 78–79).

The duality of pathways in this conceptual framework, was the model of counseling neurodiverse couples. From these two pathways emerged a core category of the central phenomenon *Speaking Autism*. *Speaking Autism* was an in vivo expression about understanding the culture and inner world (and workings) of the person with autism. It was meaningful awareness, complete understanding, and a fluency in the "language" of autism which included appreciation of the struggles of the neurotypical partner. It was the central core process that was

conceptualized in all areas of this theoretical framework. *Speaking Autism* facilitated mental health professionals to assess, evaluate, and negotiate a plan to counsel their neurodiverse clients. Each participant in this study believed they intimately knew the intrinsic language of *Speaking Autism*. Most participants believed they confidently understood the plight of the neurodiverse couple. *Speaking Autism* weaved through the constructs in each category.

Figure 1

Conceptual Framework of Diverging Pathways to Counsel Neurodiverse Couples



Diverging pathways to counsel Neurodiverse couples

Epistemology

The epistemology of our belief and value systems are truths we internalize, and in turn, become the genesis of how we understand and make sense of our world. From our personal epistemology emerges our biases, judgements, emotions, perceptions, and how we absorb and digest information that becomes our knowledge. Our personal epistemologies are influenced by our surroundings, our societies, our families. The truths we live by are molded by our education, the culture we identify with, our social world, and therefore are relative to everything to which we have been exposed. Epistemology for the purpose of this study is defined as the way people see the world and how we know what we know, and that knowledge or personal truth is relative to one's point of view (Hautamäki, 2023; Siegel, 2011). Personal epistemologies are contextualized perspectives that influence others (Tafreshi & Racine, 2015).

Epistemology is the foundational concept that influenced the pathways within this process. In this model, actions, how one evaluates information, makes decisions, behaviors, and motivations are influenced by these epistemic views from past experiences, internalized beliefs, or indoctrinated dogma. Each mental health professional embraces personal "truths" that guide their pathway. For example, Participant 8 shared, "when the time comes that you [are] to say to each other... we got what we needed out of couples counseling, what would you notice in your relationship at that point and time that would signal you that you're where you want to be" (lines 83–85). In the context of the conversation, this therapist talked about the future picture and how to know when it's been reached. What are the signs? This initially led to a code of *reaching goals/identifying goals*. After more interviews, repeatedly reading memos, comparing descriptions by other therapists, and as the study evolved, it was obvious to this researcher that therapists were sharing a commentary of their values. Their epistemologies were driving how

they saw themselves as counselors. This comment reflected this therapist's journey of their own self-discovery as they recently realized an adult family member was on the spectrum that now changed the dynamics of their relationship. They too were asking themselves "[what] would signal you that you're where you want to be?" This is epistemology.

What's Not Being Said

This concept underlined implicit actions or intentions that support therapeutic practice. In what's not being said, the therapist's personal epistemology led to explicit actions and implicit undertones within the statements and explanations given by the participants. There were implicit underlying issues that were not necessarily being overtly stated. One such compelling implicit undertone that emerged was implied expertise. Most participants implied some level of expertise. Expertise was expressed and defined differently by participants and thus merged into the pathway with similar nuances. Expertise typified in the Trust the Process pathway leaned toward research as a source for the development of a therapeutic process; this included direct learning from the clientele. For example, during a dialogue with Participant 5 about how research, over the decades, had progressed the understanding of behaviors in autism, they asserted, "So over 25 years or so I can anticipate what the themes are going to be" ([Interview transcript] lines 38–39). The implicit notion that came from therapists who held similar epistemological points of view suggested that Trust the Process reflected research and shared knowledge would guide the process of counseling neurodiverse couples. Diverging from this perspective, expertise epitomized in the My Process pathway leaned toward insight and skill by association. Some therapists who contextualized a relational connection expressed innate knowledge related to growing up with a family member with a neurodevelopmental disorder or awareness of themself with a neurodevelopmental disorder. Other participants similarly voiced Participant 2's

comment, (discussing individuals struggling with autism) "...came from having a neurodiverse person growing up [sibling] and realizing I have a unique connection to these folks who other people see as different. I felt like I could get to know them, enter their worlds, and just really enjoy them and love them and work together" (lines 65–70). There is a tacit form of confirmation bias based on a historical connection with ASD in the self or others. The innate knowledge affects the development and delivery of therapy. The implicit actions are internalized by participants in both pathways who believe they are *Speaking Autism*. More detailed discussion will be expanded in Chapter 5.

Categories

Social interaction is a social process that reflects reciprocal relationship dynamics within the context of individuals and society (Charmaz, 2014; Jenkins, 2000). Our inter-relationships are a complex web of actions, co-actions, and reactions. How the therapist perceives themselves and interacts with their clients evolves out of a complex system of individual and social processes that defines each of us. SI sees "interaction between internal self-definition and external definition by others" as an integral part of our identity (Jenkins, 2000, p.8). Our beliefs frame how we understand and interpret our world (Charmaz, 2014). It is through this lens of exploring the social process of how mental health professionals counsel neurodiverse couples that categories emerge and are defined from the data. The iterative process of analyzing and comparing begins with descriptions of the initial codes that transition to grouping patterns and relationships in more focused codes. These relationships are analyzed with increasing abstraction and grouped into more global themes that form categories. In this model, three categories were identified from the data. These categories are the social processes therapists use to counsel

neurodiverse couples. Subcategories within these categories impelled therapists to one pathway or the other. The categories include a classification of: *belief system, training (explicit actions,)* and *communication*.

Belief System

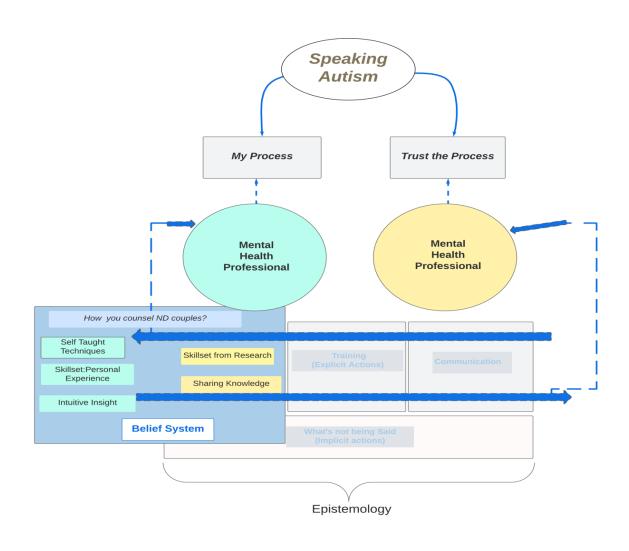
In this model a belief system is a multidimensional internalized epistemology. Belief systems are distinctive narratives we conceive to reinforce our understanding of the world—a world that needs to make sense to us (Domenech & Nescolarde-Selva, 2016). A belief system, as an emerging concept, roots participants in their reality, a reality that provides an intrinsic framework to build their relationship to help the neurodiverse couple. The internalization of personal precepts gives substance to participants' counseling approaches. Participant 4 stated "I think there's a big movement from wanting to always change people with autistic brains to simply respecting them" (lines 220–221) and continued to elaborate how autism is not unfavorable, rather "you just need different strategies" (line 230). Participant 8 shared "what I hope will happen in the world, and I feel like I'm a part of, is just saying that [ASD] relating doesn't have to look neurotypical to be good" (lines 459–461). Participant 7 reflected feeling a special connection [with clients] because of their own disability: "I know how hard it is... in relationships" (line 109), "I know the barriers I faced" (line 112), and how "I really wanted to help others who have those different dynamics" (lines 114–115). These participants mirror their personal doctrines, values, experiences, and interests into a substantive therapeutic perspective expressed by their client relationships and professional practice.

This model bifurcates the construct of belief system into pathways that align with participants' personal doctrines. Participants who shared similar belief system profiles shared similar pathways. For example, the *My Process* pathway saw participants who had a personal

history with autism through the self, family member, or spouse, or participants who felt a notional connection with neurodiversity. Not all participants who had a personal history or connection with autism merged with the My Process pathway. My Process embraced the core of participants who believed they had inherent insight into the world of the autistic partner believing they were innately equipped to identify issues and counsel neurodiverse couples through assimilation (Pakpahan et al., 2022). These participants acquired intuitive skills for counseling neurodiverse couples from experiential immersion into neurodiversity. This empirical knowledge was articulated by participants through: (a) self-taught techniques; (b) skill sets related to personal experience from a historical account with self or someone with a neurodiverse disorder; and (c) intuitive insight. One example of self-taught techniques is described as this one by Participant 3, who has a family member with autism, "they're talking to each other and I'm a little bird... whispering in their ear, trying to do reframes and slow things down. It's not me communicating to them, it's me trying to teach them to communicate to each other" (lines 167–171). This technique hinges on the notion that reframing the narrative is an integral part of therapy and persuasion is a method that is used to achieve the reframe "I'm persuasive" (line 93). Skill sets related to personal experience from a historical account can be seen from the point of view of Participant 9 who is neurodivergent, "I'm incorporating the lens of brain informed care which means that we all... experience the world on a sensory level that is different from person to person" (line 308). "I approach the therapy room with that understanding" (line 320), "so it's looking at things from a very different, deeper, cellular, neural level and applying that to absolutely every social dynamic that the couple has" (line 365). (See Figure 2.)

Figure 2

Concept Map: Diverging Pathways to Counsel Neurodiverse Couples: Belief System



Diverging pathways to counsel Neurodiverse couples: Belief System

Intuitive insight is a common conviction shared by multiple participants who expressed they believe their past experiences "uniquely situated" them to develop an intrinsic understanding of the travails of neurodiversity (Participant 2, line 42). This awareness of a deep connection is clearly articulated by Participant 2, who grew up in a neurodiverse family, and

regarded their self-actualized insight surrounding neurodiversity as a type of fluency "I feel like I'm bilingual. I also understand the non-spectrum partner…having that inherent ability to translate and create understanding" (lines 129–133).

Conversely, the second pathway, Trust the Process, surfaced a different internalized narrative of a personalized belief system. The Trust the Process pathway leaned toward a pragmatic posture for counseling neurodiverse couples. This was conferred by participants through concepts of: (a) skill set acquired from research, and (b) sharing resources with others. Counseling skills specific to neurodiversity is a hallmark characteristic of *Trust the Process* pathway. It reflects structure and strategies for counseling neurodiverse couples acquired from research and evidence-based resources; learning from experts in the field; mentoring colleagues and family; and a mindset of structured sharing of knowledge and resources with clients, family, and colleagues. Skill sets acquired from research include recognizing the importance of mentoring therapists who counsel neurodiverse couples, as well as the NT partner, through education and feedback. One participant shared their experience supervising colleagues by pointing out they were responding "too quick" and alerting them they are "almost answer[ing] for them"; reminding them that their "rhythm is...too fast" and guiding the non-autistic partner by helping them recognize that they too "need to slow down" when communicating with their autistic partner (Participant 10, line 302). Another Trust the Process acquired skill included "12 people... with a big piece of paper... Ok, what do you want to explore, and I left it to them.... [they wanted to explore] things like communication [and] emotional management. So over 25 years, I can anticipate what the themes are going to be" (Participant 5, lines 36–39). Sharing resources is important in Trust the Process pathway, "I have intentionally tried to build a network of other therapists who work with autism...where we share resources...it helps me with all that uncharted territory" (Participant 8, lines 375–376, 379). There is a growing demand to understand and "go into much more depth...we now run a program...where we go through many dimensions from emotional support to intimacy, emotion management, art of conversation..." (Participant 5, lines 29–32).

Both pathways come together because belief systems are operationalized by internalized truths. The pathways can flex from the common core of a belief system when the concepts within the belief system are acted upon differently. The pathways merge as they are informed by belief systems. They diverge because of the variability of behaviors participants impose within each concept in their belief system. The action of the participant informs the concepts which affect the flow of each pathway. The *My Process* pathway is actualized by *self-taught technologies*, *skill set related to personal experience*, and *intuitive insight*; while the *Trust the Process* pathway is actualized by *skill set acquired by research* and *sharing knowledge with others*. The behaviors of participants that inform these concepts are different in each pathway.

And since it is a belief system, most individuals are not inclined to challenge internalized thought processes or externalized actions that are generated from their individual beliefs. Belief-based conduct gains insight by processing internalized truths that are part of one's individual epistemology, not necessarily from the roots of science. It is likely each participant believed the veracity of their internalized truths which would support the notion that each participant understood and could *Speak Autism*.

Training (Explicit Actions)

Training is a category that centers around expectations, both concrete and abstract, that therapists brought to the neurodiverse couple counseling forum. In essence, it is a combination of

skill and learned behavior that is distinct from an internalized belief system. All participants received graduate school education as mental health professionals before they started working with neurodiverse couples. Their professional training, life experiences, and personal doctrines inform their therapeutic approach. "Explicit actions" are actualized behaviors by virtue of participants' professional perspectives that influence concepts within the category of training.

Half the participants (n=5) did not receive any specialized neurodiversity training; half the participants (n=5) did receive some form of specialized neurodiversity training. Most participants, from both pathways, shared similar comments about the lack of resources and training for therapists, "there is nothing out there" (Participant 7, line 139); "I was searching for resources and...there was very little here in the U.S." (Participant 6, lines 190–191) or "I don't have an official specialization from any school because there is no school of neurodiversity, so my specialty would be neurodiverse couples" (Participant 9, line 113). Comments, such as this one from Participant 7 shared therapists' awareness of the paucity of resources for clients, "how limiting information there is for couples who are on the spectrum or have autism" (line 7) and "people didn't know where to turn and not a lot of professionals specialize with couples...on the spectrum" (Participant 10, line 71). Of the mental health professionals who received specialized neurodiversity training, three participants attended an online program and two participants attended programs that included clinical hours with internationally recognized experts in autism. From the entire group of 10 participants, 3 participants continued research in neurodiversity. As of this publication, this researcher is unaware of any universal standardized guidelines for counseling neurodiverse couples.

Both pathways, *My Process* and *Trust the Process*, weave through the category depending on how the concepts are exercised by participants. The development of the *My*

Process pathway involved: (a) Counseling: Unstructured, (b) Strategy: Intuitive guidance, (c) Incentive, and d) Offering training courses. The Trust the Process pathway was shaped by: (a) Counseling: Structured, (b) Strategy: Recognizing need, (c) Motivation, and (d) Offering training courses. (See Figure 3.) Concepts in both pathways went back and forth to reveal nuanced and overt characteristics. The concepts of Counseling: Structured vs Counseling: Unstructured expressed therapists' disposition to counseling neurodiverse couples differentiated as formal and informal; formatted and unformatted. Participants felt counseling neurodiverse couples had "still a lot of uncharted territory," partly from the lack of a universal standard for what it meant to "counsel" this specialized group (Participant 8, line 516). In the My Process pathway, the concept Counseling: Unstructured was seen in this comment by Participant 4:

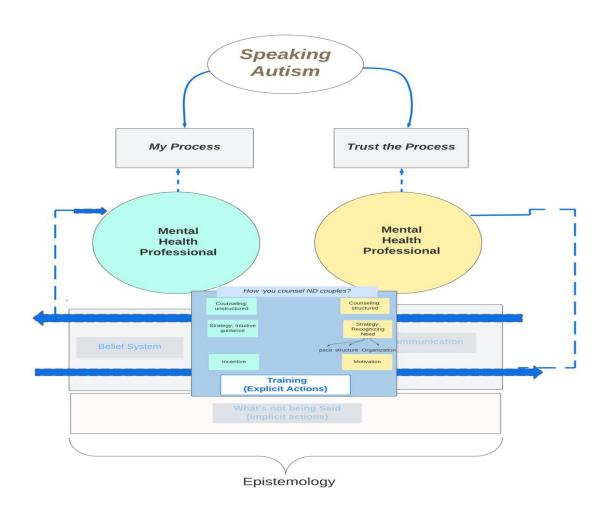
you shift gears and move whatever, from a cognitive strategy to emotional or behavioral or spiritual, even existential.... There are 500 different therapies out there, so...do your job, you're the matchmaker, find the individual and match them up to the right theory (lines 169–173)

Counseling: Unstructured embodied a type of "seat of your pants" approach to counseling; an unstructured approach to a counseling plan that was unique to each therapist. By contrast, the Trust the Process pathway embraced the Counseling: Structured concept, "We need to be patient. it's a step-by-step procedure...it changes their entire relationship in a positive way and the benefits are very, very good... so we're organized, we are structured." (Participant 10, lines 165, 166, 321). Counseling: Structured reflected a counseling approach with an overarching framework that espoused some form of structure. Some participants chose a task-based method, "I'm going to be focusing on concrete tools and strategies" (Participant 1, line 134), and "I'm

doing more skills, coachy stuff, tasky stuff everyday" (Participant 6, line 1077). And others developed methods that navigated the neurological deficit, "when I do relationship counseling, I will use the arts... Go to Google images... then [you'll] have 500 images, choose 10 images that

Figure 3

Concept Map: Diverging Pathways to Counsel Neurodiverse Pathways: Training (explicit actions)



Diverging pathways to counsel Neurodiverse couples: Training (Explicit Actions)

represent your thoughts and feelings... So, it's anything else but 'look at me' and 'tell me,' use the arts and you may find insight...oh, that's how you feel" (Participant 5, lines 247, 248–250, 254, 257). This technique was structured and based on research studies.

Strategy encompassed two conceptualized perspectives: intuitive guidance and recognizing need: pace, structure, organization. Intuitive guidance evolved from a formative code of "personal connection" while recognizing need: pace, structure, organization cultivated a degree of pedagogic assimilation. Participant 3 shared their strategy, "they need somebody who can tell them that this will work... Trust me" (lines 95, 98). This My Process pathway asserts intuition by embedding personal doctrine into their therapeutic strategy by suggesting "I know what will work, trust me" rather than trusting the process. Conversely, the Trust the Process pathway within the concept of recognizing need: pace, structure, organization allows the therapist to advise, "you don't switch to a different style of communicating with a neurotypical because the neurotypical needs to learn the autistic language" (Participant 10, lines 333–334). There is a blueprint within the process. My Process and Trust the Process pathways have some overlap within their strategy concepts. Most participants recognized the need to slow down the pace in the counseling session. This was clearly stated when Participant 7 shared, "We need to let them process... Do you need some time to think about this some more? And really allowing them to decide and have the autonomy to determine whether this is the best time to talk about this, or if they need some more time to process it" (lines 292, 297–300). Other participants talked about strategies with "mindfulness and breathing techniques" (Participant 2, lines 499–500) and "you got to slow things down" (Participant 3, line 112).

The pathways diverged with contradictory viewpoints they believed would benefit neurodiverse couples. Participant 3 stated, "psychoeducation is really not that helpful" (line 192);

however, Participants 7, 8, 9, and 10 agreed that "with my clients, I need to do a lot of psychoeducation" (Participant 10, line 437). Another therapist revealed "the most successful would be psychoeducation" (Participant 8, line 217). Emotion-based therapies were favored by Participants 3, 4, 7, and 9; Participants 2, 5, 6, and 10 did not value emotion-based therapies as articulated by this participant, "can't do it. It's Alexithymia and then can't convert emotions and thoughts to words. It's the ability to disclose inner thoughts and feelings by face-to-face conversation... for autistic individuals, sorry won't work" (Participant 5, lines 240, 242, 243). Cognitive behavioral therapy (CBT) was favored by Participants 2, 4, 6, 7, 9, and 10. No participant verbalized disagreement with CBT incorporated into their therapeutic plan. Participants 5 and 10 mentioned that CBT was very good but only the version that had been modified for autism. Participant 9 preferred narrative therapy "as long as it doesn't get too lost in metaphor" (line 734), and by contrast, Participant 5 cited "you can use metaphors. Metaphors can be very good, and I find out what is the special interest and use that potentially as a metaphor" (lines 84–85). Participant 1 used only concrete tools to teach techniques, and Participant 4 felt it was important to "understand the fact that neurodiverse couples have differences and it's grounded in intimacy" (line 193). Some therapists counseled couples for months or years depending on need, while others made it clear, "my method of working with them now is very short-term work and I explained in the first session that I'm going to be focusing on concrete tools and strategies" (Participant 1, lines 132–134). There was very little consensus between participants concerning therapeutic techniques or basic common needs of the neurodiverse couple. Both pathways reveal insight into each process. The bigger picture of counseling neurodiverse couples shows consistently inconsistent professional counseling recommendations.

The concepts of incentive and motivation reflected intrinsic drivers that kept the mental health professional in pursuit of counseling neurodiverse couples. Accruing knowledge and experience begged the question: What inspired the participants to want to continue to counsel neurodiversity? Both pathways revealed deep, passionate, strong convictions that resonated with all participants. The difference that emerged challenged impetus. Words such as "passion," "connected," and "inspire" were frequently expressed throughout the interviews. The impression of this researcher was that all participants wanted to counsel neurodiverse couples. Motivation in the Trust the Process pathway was often associated with personal connection or academic interest in neurodiversity. For example, "I was very motivated and hardworking, I think that passion comes from the knowledge... it's an issue close to my heart" (Participant 2, lines 147– 148, 157). Participants who share comments such as this reveal an authenticity with their purpose, "I love working in this field and discovering so many things, and it's a passion. I think [enjoying] it makes a huge difference. I think it's the passion plus the here-and-now for me. When I do a [session] with my clients, that's my existence. Nothing else exists outside" (Participant 10, lines 715, 731, 733). By contrast, incentive was a concept that, while participants were still engaged with counseling the neurodiverse couple, there was a nuanced undertone. Participant 3 shared, "I actually love what I do, and I'm good at it. When you're successful [financially], it really helps" (lines 252–253). Another comment from the My Process pathway gave pause to consider an implied context, "I started my own...counseling [business] and we are almost at a year. Things are growing at an exponential rate, and I have a waiting list that doesn't seem to be going down, which I, in a way, welcome" (Participant 6, lines 208–215).

Communication

Communication is a cornerstone for therapy. In this model, communication is an important category that observes the processes therapists use to communicate with their neurodiverse clients. The way the therapist makes sense of their world informs the precepts that influence their communication with their neurodiverse clients. The communication processes used by the therapists with couples with impaired social communication issues are reflected by the duality of the pathways. Each pathway represents different communication approaches.

Interpreting

Within the communication category exist three concepts: interpreting, translating, and bridge the gap. All therapists verbalized a need to help clients understand the "language" of their partner. The actions of the therapist on these concepts were reflected in each pathway. In this model, interpreting was defined as "explain the meaning of" (Oxford University Press, 2003). Translate was defined as "to convert into another language" (Oxford University Press, 2003). When a mental health professional interprets for the neurotypical or the neurodiverse client, they insert their sense of reality into their interpretation. As they "explain the meaning of" the intentions of the neurodiverse partner, they draw from their own reservoir of personal experiences, depth of knowledge, and scope of understanding. The inferences are unique to the individual therapist and will transcend from their self through their positionality, attitude, social identity, or choice of diction to whomever receives the interpretation. The driver of interpreting is to reframe the narrative. For example, when asked how they managed a frequent problem in autism—rigidity of thought—in therapy one therapist responded, "I'm persuasive. I'm confident. They need somebody who can tell them that this will work. So, I'm a carrier of hope. Life is like a giant experiment; you try new things. Trust me" (Participant 3, lines 95–98). This therapist

drew from their reservoir of personal experiences, depth of knowledge, and scope of understanding to interpret the client's "need to [hear] this will work." The reframe of the narrative seemed to implore don't trust yourself, "trust me." The decisions of the therapist when *interpreting* determined the *My Process* pathway. It is the therapist's undertone that informed the pathway in this concept.

Translating

Translating, by contrast, is part of *Trust the Process* pathway. Therapists help each neurological culture—neurotypical and neurodiverse—to learn to decode behavior and understand nuances. Participant 10 recognized "the main difference is usually the lack of theory of mind; the ability to understand other people's way of thinking and feeling. They have their own way of thinking. So, this is where my role will be to... translate both worlds" (lines 109– 110, 117). Each pathway beckons the therapist to be involved with breaking down walls. Translating converts the neurodiverse language and culture into something the neurotypical can understand, "my role was as a translator between two different cultures, with no value judgement that one is superior to the other, they're different. And explaining autism to the neurotypical" (Participant 5, lines 20–21). The reciprocity of the practice of translating, "help[ed] us translate each other's experiences because sometimes, no matter how hard we try, we just don't understand each other" (Participant 9, line 1505). The therapist taught the couple to translate for each other, "I'm always trying to work myself out of a job to help them [translate] for themselves. I don't want to be in the position of them dependent on a translator, but they tell me all the time, our sessions help translate" (Participant 9, lines 1517–1529). The pathways weave back and forth between interpreting and translating, how the participant acts in each concept will determine their pathway.

Bridging the Gap

Bridge the gap was neither interpreting nor translating. The therapist helped the couple find a "bridge" into each other's culture, "how [do] you understand that communication yourself?... ensuring that your partner hears that because a lot of times when those stuff are shared, the other partner is like, 'oh, I never thought about it that way'.... then we find a bridge in between there" (Participant 7, lines 212–215, 217). Translating and bridge the gap are on the Trust the Process pathway. Participant 6 articulated, "this is how they're bridging by finding their own unique language and their own unique way of doing life" (lines 1177–1178).

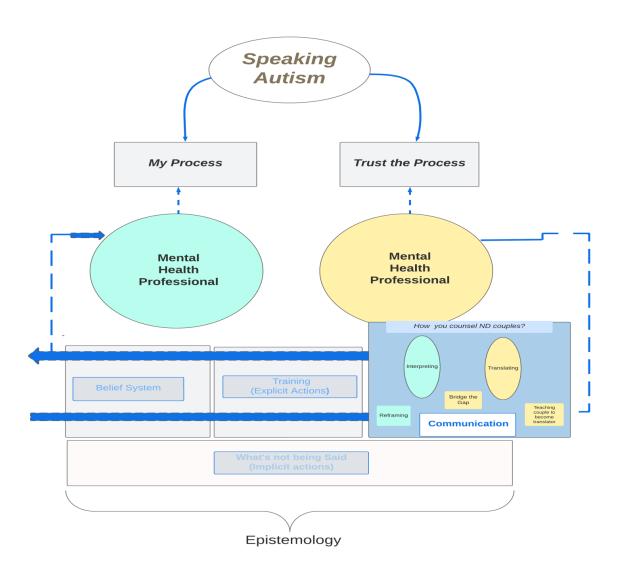
The pathways merged through communication. Participants who chose the notion to *interpret* aligned with the *My Process* pathway. Participants who chose to *translate* or *bridge the gap* aligned with the *Trust the Process* pathway. (See Figure 4.)

Two Pathways to the Core Process: Speaking Autism

What did *Speaking Autism* mean? *Speaking Autism* is an in vivo colloquialism that means to intricately understand the culture and inner world (and workings) of autism. It is an all-encompassing embrace of the neurological, psychological, and emotional aptitudes of autism. *Speaking Autism* is to understand the benefits and deficits in communication and social behavior that may impact healthy interplay within an intimate relationship. *Speaking Autism* for the person with autism is:

Figure 4

Concept Map: Diverging Pathways to Counsel Neurodiverse Pathways: Communication



Diverging pathways to counsel Neurodiverse couples

very clear, unambiguous. You don't use idioms or turn of phrase [slang vocabulary]. You are direct and you can use metaphors. Metaphors can be very good, and I find out what is the special interest and use that potentially as a metaphor. With the neurotypical... be much more conventional in terms of reference to thoughts, feelings, interpretations, etc. It's almost two cultural languages. [You] have to adapt accordingly. (Participant 5, lines 82–88)

In this theoretical framework, *Speaking Autism* is a central core process that is conceptualized in all areas. *Speaking Autism* has two pathways that begin from a foundation of epistemology of each participants' belief and value systems. Personal epistemology was truths participants internalized that formed their judgements, biases, knowledge, fears, and emotions. Every participant had a personal epistemology which influenced their decision-making, thoughts, perspectives, and attitudes. The manner with which participants embraced and understood the process of *Speaking Autism* originated from their personal epistemology. Essentially, ingrained truths that governed each participant, endorsed their convictions that they intimately knew the intrinsic culture of *Speaking Autism* without verbalizing a formal definition of what *Speaking Autism* meant.

Two Pathways

Internalized truths forged implicit actions in what's not being said. These implicit actions prepared the emerging pathways with implicit undertones that navigated concepts within each category. Two pathways were conceived in what's not being said but did not begin to formalize until interaction with concepts within the categories. These pathways were: My Process and Trust the Process. These pathways weaved through each category that led to the core process of

Speaking Autism. Therapists gravitated to either pathway through their decision-making and actions. The practices expressed by each participant were influenced by the internalized truths of their epistemology, implicit actions, belief systems, training, and communication. Both pathways led to the core process of Speaking Autism because therapists in both pathways believed they understood Speaking Autism. Therapists in the My Process pathway had markedly different experiences than therapists within the Trust the Process pathway.

As the pathways weaved through each category, pronounced differences between the pathways became evident. In the My Process pathway, self-taught skills were often exercised based on a sense of intuitive knowledge. Participants incorporated many different therapy styles initially crafted from any standardized counseling curriculum, but not specific to neurodiversity. No therapies practiced by the participants of the My Process pathway were modified for a neurodiverse audience. By comparison, participants on the Trust the Process pathway also felt a sense of intuitiveness, however, their therapy approaches were sourced from research. They used therapeutic methods that were modified specifically for autism. Methods such as CBT have been studied and modified and found to be effective with autism (Gaus, 2018). The therapeutic practices of the My Process pathway draw on personal experiences or beliefs about autism or the neurotypical partner that reflect their personal propensity. Participants on this pathway implicitly and explicitly embraced a core tenet that, because of a history of personal association with family, spouse, or the self with neurodiversity, their lived experiences have given them intrinsic insight into the world of autism. This internalized mindset supported their conviction that they were Speaking Autism. There was a tendency toward an unstructured approach to the counseling process. The My Process pathway noted therapists skirted around unsuccessful stories. When asked about unsuccessful stories this articulation from Participant 3 is representative of the My

Process pathway, "I don't know, I haven't really thought that through. You know, I don't know. I can't scientifically answer that.... they're too checked out when they start. You know, she's too burned out and he's or maybe she's already got somebody on the side, or... he's so deep in his work environment, because a lot of these people, that work is their mistress" (lines 262–268). An unsuccessful story is the couple's fault, not the therapist's. On the other hand, participants in the Trust the Process pathway had a different perspective to difficult or unsuccessful outcomes.

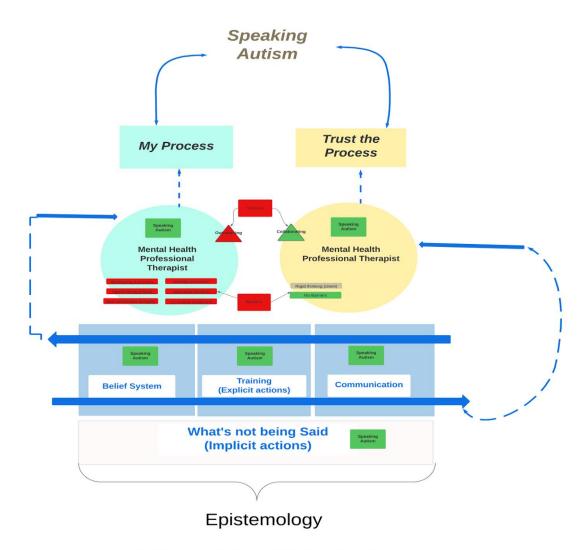
They learn from the experience and turn it into a teaching tool for other therapists, "[now] I'm very, very, careful the way I discuss it, but I need to know, because, if that's the case, I developed... over the last 3, 4 years a training session...and so I adapted a lot of CBT... I refined techniques to explore... and now I think I'm much more aware of this" (Participant 10, lines 554–559).

Sub-Concept: Barriers

There were two sub-concepts that harbored obstacles for some therapists. These included barriers and teamwork. (See Figure 5.) Participants in the My Process pathway identified multiple impediments to therapy that were not thought of as hinderances for the Trust the Process pathway participants, rather they were deemed part of a bigger clinical picture. These hurdles (or barriers) to therapy included: developing a process, rigid thinking of the ASD partner,

Figure 5

Concept Map: Developing Core Process: Speaking Autism



Developing the Core Process: Speaking Autism

lack of awareness of ASD partner (insight), lack of resources (for the therapist), EF disorder, and co-morbid conditions. One therapist's clinical perspective reflected intolerance (relating to rigidity of thought of the ASD partner), "the biggest barrier is that trust building phase, getting

through that 'hey, this person can't change', because they're locked into this mindset. Well,

mostly she, the neurotypical, if he's rigid, he's not going to change, he's not capable."

(Participant 3, lines 151–154). Rigidity of thought is a life-long disorder for partners with ASD

that contributes to ongoing interpersonal problems (Hollander & Ferretti, 2023). As one

participant from Trust the Process noted: "One of the issues that I do face from the neurotypical

is a yearning for quite conspicuous change. And I say, 'I wish that were possible, but it may be

having to come to terms with acceptance of who the person is" (Participant 5, lines 301–303).

To address barriers to therapy, the counselor may "outsource" their client to other therapists who

have specialized skills but have little or no autism experience such as noted by Participant 1, "if

there is a co-occurring condition... getting in the way of trying new strategies... I would

suggest... you need to do some anger management work and then come back" (lines 191–194).

In the *Trust the Process* pathway, therapists were not impeded by co-morbid conditions.

Participant 5 explained:

In autism anger is often caused by anxiety or depression. You have strategies to alleviate

anxiety; if you are thwarted from doing that, that leads to frustration and that leads to

anger. In autism when you're depressed you have an externalized agitated depression.

But in autism it can be external and blaming others. It's not a lack of energy, it's an

explosion of energy... it is more constructive to treat depression rather than anger

management issues (lines 212–215, 217–218, 221)

No therapist waivered in their conviction of *Speaking Autism* in light of perceived barriers.

Sub-Concept: Teamwork

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The second sub-concept was teamwork. There was a distinct difference in how each pathway viewed and integrated teamwork into their therapy. The *My Process* pathway incorporated teamwork by "outsourcing"; the *Trust the Process* pathway incorporated teamwork through "collaboration." For example, counselors within the *Trust the Process* pathway discerned how non-neurodiverse-trained therapists do not understand the nuanced characteristics of this specialized couple dynamic: "some couples have been to 3, 4, 5 counselors with no benefit and they feel nobody understands their world, or the wiring differences, or pathologizes the non-autistic person" (Participant 6, lines 272–275). Participant 10 articulated:

the therapist who doesn't know about autism and [misunderstands] the person with autism... they do wrong things, they sometimes are not appropriate, but they don't do it with negative intention. It's really, they don't know, and they misread communication, they misread the need. That's why many [persons with ASD] come back very, very depressed, and broken. The main problem for the non-trained therapist is... [they] project their own fear, anxiety, or anger at the autistic partner (lines 443, 446, 448, 449, 455)

Incorporating teamwork with autism-informed colleagues with specialized skill sets, the *Trust* the *Process* pathway illustrated collaboration as:

I work with 2 colleagues in my clinic who are experts in PTSD. One is a psychologist, the other is a sexologist. They use EMDR adapted to autism. The female with autism... will work with my colleague for a number of sessions, and then we will continue to work together as a team (Participant 10, lines 190–194)

Counselors within the *My Process* pathway treated co-morbid disorders as issues that were separate and distinct from autism that would be addressed if "outsourced" to a therapist with a specialized skill set but not specifically autism informed. One counselor shared:

I do think the rigidity of thought would do better with some anti-anxiety medication because I think that will bring [their] anxiety down and the rigidity goes down a little bit. So, I do work with a psychiatrist that I refer people to sometimes. Meds can help. Just smooth out some of that volatility and explosiveness (Participant 2, lines 251–255, 261–262)

Both pathways incorporated teamwork into their counseling framework when the counselor determined it would be helpful for the neurodiverse couple. The actions and behaviors of participants in each pathway gravitated to different measures.

Summary

Neurodiverse couples seeking therapy are a nascent and rapidly expanding group. The paucity of literature in neurodiverse therapeutic techniques prompted this study to examine the social processes mental health professionals use to provide therapy to neurodiverse couples. This study found two pathways that led to the core social process of *Speaking Autism*. Mental health professionals subscribed to one or the other pathway: *My Process* or *Trust the Process*. Each pathway that accommodated the counselors reflected the choices they made through their actions and behaviors within three categories: *belief systems*, *training (explicit actions)*, and *communication*. Counselors who gravitated toward the *My Process* pathway tended to lean toward assimilation as a process to understand neurodiversity through the counselor's point of view. Their process or pathway enabled the counselor to rely on intuitive skills that emerged

from their perceived life history of immersion into neurodiversity. The *Trust the Process* pathway elicited a pragmatic stance with counselors. These counselors relied on structure, strategies, and evidence-based resources to guide their counseling, rather than intuitive insight. *Speaking Autism* is a colloquial term that reflects a deep and sophisticated understanding of the nature and culture of the autistic world. Both pathways believed their internalized truths regarding neurodiversity afforded their acuity to *Speak Autism*.

The findings in this study highlight a gap in the literature to further explore therapeutic techniques with effective outcomes for neurodiverse couples therapy.

CHAPTER FIVE: DISCUSSION

The major finding from this study—the social processes that mental health professionals use to counsel neurodiverse couples—was highlighted by a duality of merging and diverging pathways. These pathways integrated three categories that included *belief systems*, *training* (*explicit actions*), and *communication*. These categories each informed the core process of *Speaking Autism* by the actions and behaviors made by therapists in each category. The framework identified how personal epistemology shaped a scope of perspectives that affected decision-making actions which influenced professional behavior. The model tied the "whys" and "hows" therapists tended espouse to one of two pathways.

Underpinnings of Epistemology and Belief Systems

Thoughts, beliefs, and context for decision-making behaviors are integral and relative to every therapist's personal epistemology. Epistemic stances are the formation of personal truths evolved from a history of interactive shared meaning from experiences or indoctrinated dogma. Personal truths predicate the therapist's decisions, actions, behaviors, motivations, and choices. It would be difficult and meaningless to try to be fully cognizant of every experience that activates our decision-making processes (Mudrick et al., 2022). Internalized truths are the manifestation of beliefs integrated into one's core self. Beliefs and belief systems embrace the epistemic position of doxastic involuntarism, meaning beliefs are not actualized by the conscious intention of the individual; beliefs are not actions; nor do individuals have the ability to choose their beliefs (Perrine, 2020; Smith, 2023; West, 2014). Individuals have no control over what they believe. Beliefs are abstract constructs that elicit the therapist's lived truth (Schommer-Aikens, 2004).

Individual actions and behaviors acted on by the participants in this study were impelled by a deep sense of "knowing" that was resourced by an internal matrix of beliefs. This infrastructure of deeply held truths, allowed the therapist to perceive, interpret, communicate, make sense of the world, and form an understanding of reality which influenced therapeutic decision-making "I feel like I'm bilingual" (referring to understanding the languages of autism and the neurotypical; Participant 2, line 129). Therapists on both pathways demonstrated, through their actions, therapeutic decisions guided by internal beliefs. All participants in this study were fully trained and qualified therapists. Neurodiverse couples counseling is a burgeoning new area of therapy limited by: (a) a paucity of literature in evidence-based therapies, and (b) nationally certified guidelines that have not yet been developed. Individual truths or beliefs set the groundwork for developing personal knowledge. Personal beliefs also cultivate "points of view" that are extracted from current and past lived experiences with neurodiversity (Schommer-Aikens, 2004, p. 108). Some participants shared counseling opinions that were directly in opposition to others: "psychoeducation is really not that helpful" (Participant 3, line 192); contradicted by: "I need to do a lot of psychoeducation" (Participants 7, 8, 9, 10, line 437). Without regard for the basic pathology of neurodevelopmental disorders, the most obvious contradictory counseling opinions were polarized by therapists who favored emotion-based therapies (Participants 3, 4, 7, and 9) in contrast to therapists who argued against the value of emotion-based therapies (Participants 2, 5, 6, and 10).

Sandoval (2004) differentiated between "formal epistemology or the set of ideas... about professional (formal) science" with "practical epistemology that refers to the set of ideas... about... knowledge production" (p. 636). Sandoval's epistemological inquiry asked "How do we know what we know? Why do we believe it? And what exactly do we know?" (p. 638). These

questions compare understanding of how inquiry impacts awareness with how preconceived knowledge impacts inquiry (Sandoval, 2004, p. 638). Sandoval's inquiry aligns with this study's contrast between therapists who integrated "acquired" neurodiversity proficiency from past experiences with persons who have ASD as their sources of neurodiverse knowledge—the *My Process* pathway—compared with the therapist who used research to make their counseling decisions—the *Trust the Process* pathway.

In the past decades there have been a growing number of studies that have explored the implications of epistemological beliefs on psychotherapeutic practice. Negri et al. (2019) argued that it is the "lack of reflection on the epistemology they reflect that constrains attitudes toward both clinical and research practice" (p. 355). An introspective article reflected one researcher's own social work professional pathway that explained how epistemology informed social work practice and research, and how social workers "are aware that their own knowledge claims are often tentative, based on limited and inconclusive information..." (Hardy, 2016, p. 771). Hardy notes that this is epistemology awareness in action and asks if "... practitioner opinion is sufficiently robust to function as the basis for judgments and decision-making in social work" (p. 775). He believed that it may when research has not provided the knowledge for practical wisdom. He contemplated the plurality of sources of knowledge and suggested that it is not enough to "know whether or not an intervention is effective; rather it is to establish what works in which circumstances, for whom and why" (p. 771). Hardy proposed that the knowledge base of social work practice and research should be a consensus, to bring knowledge integration to improve practice competency, which aligns with the practice of counselors in this study who follow the *Trust the Process* pathway.

When considering the influence of epistemic assumptions on therapeutic practice, client relationships, and interventions, Lee et al. (2018) investigated the therapist's epistemic leaning and its impact on these variables. Researchers had participants complete questionnaires that included their prominent theoretical preference and questionnaires measuring dimensions of rationalist and constructivist therapies, epistemology assumptions, personal style, and patienttherapist relationship bond. Researchers looked for the therapist's world view to reflect their dominant epistemic style. The epistemological groundings that support cognitive therapies are presented by opposing positions: rationalism and constructivism. Rationalism epistemology fosters a cerebral approach to knowledge that has one objective reality. Rationalist cognitive therapies are premised by logical thinking, control, rationality, and reasoning. The constructivism epistemic approach emphasizes meaningful experiences, and that reality is personal. Constructivist cognitive therapies are less cerebral than rationalist therapies and value reflection and introspection (Lee et. al., 2018). The study conducted by Lee et al. (2018) suggests that epistemological beliefs influence actions that affect outcomes and that clients may choose to approach a therapist whose style aligns with their needs. Importantly, therapists in this study aligned with the epistemological styles in the Lee et al. (2018) study. My Process pathway therapists did not necessarily follow known evidence-based interventions, nor did they set goals. The *Trust the Process* pathway therapists used combinations of evidenced-based interventions during patient sessions. Current treatment for people with autism involves incorporating special interests into the care plan to improve practical skills and social functioning, creating an inclusive environment, prompting, explicit rules, modeling, direct feedback, and autism-modified CBT for a happy and meaningful quality of life (Fuentes et al., 2021). More research into

therapeutic outcomes of therapists who use rationalistic therapies for neurodiverse couples needs to be conducted.

Training

The findings from this study indicated there were significant discrepancies in the depth of comprehension of neurodiverse issues, therapy styles, and strategies from therapists who were autism informed and those who lacked formal training or professional mentoring. Currently there are limited studies examining effective therapies for neurodiverse relationships, however, within the last few years, research on adults with autism and neurodiverse couples counseling has been increasing. The recommendations echoed from the literature reflect a paradigm shift toward research on issues related to adults with autism. Clinical approaches for neurodevelopmental relationship counseling were investigated for efficacy using multiple measures. Preliminary studies on solution-focused brief therapy (SFBT) look promising (McDowell et al., 2022; Parker et al., 2020). Researchers exploring efficacy of SFBT in adult romantic neurodiverse relationships offer insight into multiple analysis methods that enhance qualitative studies; further studies are warranted for a deeper understanding of the findings and to explore the effect of modifications (McDowell et al., 2022; Parker et al., 2020). CBT modified for autism was another counseling approach that was extensively researched and adapted specifically for adults with autism and incorporated into neurodiverse couples (Gaus, 2019). The effectiveness of CBT on multiple clinical problems associated with ASD has been widely acknowledged by the therapeutic community that uses it. As of this publication, national guidelines for counseling neurodiverse couples have not yet been established in the United States.

This study found a deficit of knowledge related to neurodevelopmental disorders from therapists who advocated to counsel these couples. Other studies found similar findings (Mitran, 2022; Smith et al., 2020). The lack of awareness of autism, the pathophysiology of neurodevelopmental disorders, and residual experience and impact for the NT partner, can do harm especially when the therapist does not understand the needs of the partner with ASD and refers them to non-autism-informed therapists for co-morbid conditions that may be an unrecognized presentation of autistic distress (Gilmore et al., 2022; Stafford, 2023). Stafford (2023) points out the advocacy role of the therapist cannot be upheld if the therapist is not autism-informed. It is critical that therapists who counsel neurodiverse couples be autism-aware. Therapists on the *Trust the Process* pathway used a team approach when counseling neurodiverse couples. All professionals were autism-informed with specialized skills and techniques specific to their clients who had ASD. Nurses are the frontline of healthcare and have the most interaction with, and the greatest impact on, the neurodiverse family or patient with autism. It is crucial for nurses to be autism-informed. It is likely they have already treated patients with autism or neurodiverse families and not been aware. The knowledge base of an autism-informed nurse could affect the healthcare experience and outcome of patients who may have autism and not know it or be hiding it. The rate of people being diagnosed with autism and other neurodevelopmental disorders is rapidly increasing annually (CDC, 2023), the lack of autism-informed professionals in healthcare, mental health, medicine, teachers, police departments, social work, nursing homes, clinics, and many others must no longer be ignored nor tolerated in our society.

Communication

Communication is a cornerstone of therapy. Communication is also the psychological link to inclusion, interpersonal connection, happiness, well-being, mental health, and safety (Annan et al., 2023). Communication is part of the human condition that is a vital part of healthy

relationships. Deficits in communication are a diagnostic criteria hallmark of individuals with autism which is a contributing factor to miscommunication in relationships, partner distress, loneliness, and long-term health implications (Wilson et al., 2017; Yew et al., 2023). Partners who have autism and impaired social communication skills take longer to process information, are prompt dependent because of their communication deficits, have difficulty connecting emotionally with their NT partners, and have a lower sense of well-being (Wilson et al., 2017). The findings in this study uncovered opposing communication processes. One pathway, My *Process*, reframed the narrative and inserted their own reality into their interpretation. The other pathway, Trust the Process, shared reciprocity through translating or converting the neurodiverse language and culture into something the NT could understand. Heinonen (2020) investigated the characteristics of psychotherapists to predict patient outcomes. He realized that the most effective therapists were identified by "interpersonal capacities that are professionally cultivated" (p. 27). Bennett-Levy (2019) also recognized how ongoing personal development played a part in the therapist's skill development. Therapists on the Trust the Process pathway followed a researched-based process. Communication is an important bridge in all relationships. Nurses are well positioned to identify patterns of difficult communication that are recognized as the result of unmet needs and the emotional frustrations of a neurodiverse relationship, and provide support or resources (Owen et al., 2020). More research is needed to determine the effectiveness of therapists who communicate using interpretation compared with a translating style.

Evidence-Based Practice in Psychology

This study found therapists followed one of two pathways when assessing and developing a plan of care for neurodiverse couples. Therapists followed either a *My Process* pathway or a

Trust the Process pathway. The My Process pathway was a process in which the counselor didn't necessarily adhere to any formalized structure or guidelines, hence, "my process." Observed in this pathway was consistently inconsistent methods of therapy management that included inconsistent means of identifying neurodevelopmental disorders to identify different disorders or the degree of impairment impacting the relationship. Intake forms were often used as a primary source of identifying problems as decided by the couple. People with ASD neurology may have varying degrees of undiagnosed alexithymia, weak central coherence, or lack ToM where there is possibility, they may not have the tools to articulate their feelings, express with any depth of insight, or understand the nuanced problems within themselves or expressed by their neurotypical partner on an intake form. This suggests inconsistent assessments when trying to understand the full scope of deficit and needs, both inter- and intra-personally (Camm-Crosbie et al, 2018; Stafford, 2023). Therapists without formal training on the pathophysiology or the neurology of a neurodevelopmental disorder may not have the knowledge base to provide a comprehensive assessment. The therapist who required the partner with autism to describe problems in the home may not be aware of neurological disorders that hinder the partner's ability to put thoughts or feelings into words. Co-morbid conditions that may actually be a part of the autism picture but present as behaviors of anger or depression may have been misdiagnosed and instead considered an extraneous issue outside of autism and beyond the scope of neurodiverse couples therapy. Over 95% of children, and greater than 81% of adults, with autism have at least one co-morbid condition (Soke et al., 2018; Vohra et al., 2017). Therapists would identify comorbidity as conditions separate from ASD and outsource to therapists non-autism-informed therapists who specialize in the co-morbid disorder. The ASD partner would be referred to nonautism-informed therapists to "fix" before resuming neurodiverse couples therapy. There was an

inconsistent understanding of the pathopsychological complexity in the range of neurodevelopmental conditions, co-conditions, and sub-conditions. Professional practice guidelines recognize the need for integrated care known as "collaborative treatment planning" with the responsibility of the counselor to describe the "associated risks and side effects" (American Psychological Association, 2021, p. 11). Therapists in the *My Process* pathway noted that some couples voiced having seen multiple therapists prior, but impressions of the impact of non-autism-informed therapists on the couples were consistently inconsistent. They would outsource partners to therapists they liked, or therapists with a specialization. Therapists from the *My Process* pathway did not identify referring partners to autism-informed therapists.

The current lack of national guidelines for neurodiverse couples therapy did not prompt mental health professionals to assess the efficacy of the different therapies, coaching, or tools offered to the couples who interlaced a lifelong disorder into a mixed neurology relationship.

There was little consistency and limited rationale for the broad, and seemingly random, range of therapy regimens offered to this highly specialized dyad. Therapists tended to choose therapies based on personal preferences or familiarity with a modality[s] learned in their respective schools of training, rather than therapies that complimented or accommodated the pathopsychology and/or pathophysiology of the neurodevelopmental dynamic. The *My Process* pathway therapists did not provide therapies that were modified for ASD. Dr. Tony Attwood, a respected authority in autism research, stated that neurological expression is manifested in people with autism through distinct ways of learning, thinking, and understanding. If the purpose of therapy is to help people with ASD cope with and accommodate these unique challenges, then therapy needs "to be adapted from the conventional approach in order to accommodate these variations" (Gaus, 2019). Many *My Process* pathway therapists did not have neurodiverse

couples therapy training and frequently made practice decisions that stemmed from their personal epistemology. Many believed that their experiences growing up in households with family members with neurodevelopmental disorders; or spouses or children with previous or recent diagnoses; or self with autism gave them firsthand, intuitive knowledge into autism and thus made them uniquely qualified to provide efficacious care. They believed this personal awareness also afforded them in-depth acuity into the struggles and burdens of the neurotypical partner.

Currently, this researcher is unaware of any nationally recognized guidelines for neurodiverse couples therapy. Best-practice or evidence-based practice in psychology (EBPP) are policy guidelines for the conduct of psychologists. These policy guidelines recommend research evidence to inform decision-making and interventions in practice (American Psychological Association, 2002). EBPP policy provides a working framework that supports research data, clinical expertise, and specific patient characteristics to achieve best practice (American Psychological Association, 2021). Juxtaposing findings from this study with the EBPP framework demonstrates gaps and exposes a great need for national counseling authorities to establish guidelines and standards for neurodiverse couples therapy.

The goal of every therapist in this study was to counsel neurodiverse couples. Two pathways differentiated processes used by the counselors. A finding in this study revealed counselors with little or no specialized training in therapy for couples with different neurologies where one partner has ASD, and the other partner is neurotypical or does not have ASD. For professionals to provide the most effective care, EBPP recommends the "integration of three factors in the delivery of psychological care: the best available research evidence, the expertise of the clinician, and patient characteristics, culture, and preferences" (American Psychological

Association, 2021, p. 8). The *Trust the Process* pathway incorporated these factors; the *My Process* pathway did not use available research, and believed they were adapting therapy to patient preferences because they "knew" their patients. These counselors believed in their clinical expertise. The American Psychological Association (2021) policy defines clinical expertise as "competence attained... through education, training and experience that results in effective practice" (p. 8) which differs from expertise claimed from growing up with a family member with a neurodevelopmental disorder.

Therapists in the *Trust the Process* pathway followed an evidence-based approach. Their counseling approach followed a larger research-based protocol. These therapists' decisionmaking was based on Trusting the Process. They used an assessment protocol for the neurodiverse couple prior to therapy to develop a focused plan of care. Therapists used intake forms, but not as their primary source of issue identification. The therapists on this pathway used their knowledge of the pathology behind the struggles of the partner with ASD with limitations of expression, communication, and lack of grasping nuanced signals and diagnosed relationship issues using multiple means. These therapists addressed and treated the full range of conditions, co-conditions, and sub-conditions as they considered these to be a part of the autism condition and part of neurodiverse couples counseling. Part of the regimen that these therapists prioritized included following the research, publishing findings, being mentored and mentoring colleagues, attending or speaking at academic conferences, and sharing information. The Trust the Process therapists collaborated with other autism-informed specialists when a co-condition presented that needed specialized attention. Depending on the needs of the neurodiverse couple, therapists found CBT modified for autism to be most effective. CBT consists of therapies that focus on changing or affecting behavior by addressing thoughts, assumptions, and perceptions (Dozois et

al., 2019). The approach and the interventions used in CBT have been modified to accommodate the characteristics of the autistic mind. They collaborated with other autism-informed specialists when a co-condition presented that needed specialized attention.

Therapists from the *My Process* pathway used intake forms as a primary source of data gathering and identifying interpersonal relationship issues. EBPP policy suggests "assessments are to clarify patients' presenting concerns" and includes "diagnosis of presenting problems and disorders, [and] case conceptualization" (American Psychological Association, 2021, p. 10). Diagnosis was often not deemed important by many therapists and self-diagnosed ASD or couples who complained of "communication" problems were grouped as neurodiverse without determining a diagnosis.

The lack of nationally recognized guidelines, specifically for this new genre of specialized couples therapy should prompt counselors to closely monitor outcomes. Within the *My Process* pathway, the clinical monitoring of partner outcomes was consistent—it was the randomness of defining *how* success was measured that emerged. When asked about monitoring progress, one counselor took a concrete perspective and asked, "what was the barrier?" (Participant 1, line 244). Another stated "in the first session we do our goals. This is what we said we are working on. How's it going? How's your marital satisfaction?" (Participant 3, lines 227–229). Goals are static and seemingly one-dimensional. EBPP recognizes monitoring assesses "patient psychological symptoms, interpersonal functioning and social support [and] quality of the therapeutic relationship" (American Psychological Association, 2021, p. 16). This is critically important specifically for the neurodiverse couples' population.

This study calls attention to an immediate need for empirically derived guidelines and standards to be established for neurodiverse couples therapy. There needs to be a roadmap of

consistent techniques for assessing, measuring conduct, developing, and implementing plans for neurodiverse couples. To ensure optimal therapeutic outcomes, guidelines need to be established to maintain consistency of practice through research-informed policy. This study points out that counselors establishing themselves as clinical experts without nationally standardized training in this specialized niche need to be certified by a national certification program. EBPP recognizes "expertise as develop[ing] from clinical and scientific training, theoretical understanding, experience, self-reflection, knowledge of current research, and continuing education and training" (American Psychological Association, 2021).

Justice Components

Within the context of CGT methodology, Charmaz (2014) allows "grounded theorists [to] offer integrated theoretical statements about conditions under which defined forms of injustice... develop" (p. 326). Implicit justice components developed from the data. Re-examining data, repeatedly exploring theoretical categories, and taking a step back to consider perspectives from the scope of a larger social dynamic allowed this researcher to see the emergence of social justice health disparity and ethical elements. They emerged from the experiences and narratives of the therapists.

Clinical Expertise

Some participants suggested clinical expertise in neurodiverse counseling but had little or no formal training in neurodiverse couples counseling. All participants suggested some level of expertise and either implicitly or explicitly assumed the role. The role of expert had varied definitions depending on the pathway. The *Trust the Process* pathway communicated how expertise was acquired through a type of extrinsic locus track, "I developed a program that was

eventually published....I was trained, we had so many couples coming for counseling, also family counseling because many of them have children on the spectrum and eventually I was running the clinic....I continued to develop, [gain] experience, attending many workshops, reading books, and mainly learning from clients and couples themselves" (Participant 10, lines 66–72). Participants had multiple avenues of experiential learning. Information was personally shared through mentorship or dissemination to other professionals through teaching and publishing. A frame of reference for expertise emerged with an explicit and experiential position.

Expertise intuited by the *My Process* pathway communicated expertise through a type of intrinsic locus track, "I recognized that I thought my [family member] might be on the autism spectrum and did a ton of research to try to understand that better and be able to integrate how people are describing autism with my own lived experience of a lifelong relationship...it just felt like the right time to lean into something that was personally really interesting and meaningful to me and to make it a professional focus" (Participant 8, lines 39–41, 46–47). The literature is rife with a wide range of criteria, definitions, and domains that define "expertise" (Bourne Jr., 2014; Ericsson, 2014; Goldman, 2018). The term "expert" was described in a variety of ways depending on valued, implied, or understood nuanced characterizations specific to a particular domain (Bourne Jr et al., 2014). EBPP articulates, "expertise develops from clinical and scientific training, theoretical understanding, experience, self-reflection, knowledge of research, and continuing professional education and training" (Presidential Task Force on Evidence-Based Practice, 2005, p. 11).

In this conceptual framework, an "expert" mastered the specialty of neurodiverse counseling and afforded the therapist a high level of objectivity in judgement and acuity and recognition and trust from peers to have formidable knowledge and insight, while giving and

receiving ongoing mentorship to hone skills and improve relevance. Therapists who were in the *My Process* pathway expressed implicit knowledge to define their expertise compared with therapists from the *Trust the Process* pathway who discussed how they obtained evidence through research incorporated into their practice and continued education. Therapists' knowledge base of autism, the isolating distress of the NT partner, variations of presentations of autistic phenotypes, the complexity of interpersonal and intrapersonal needs and expectations are all components for essential baseline knowledge for therapists who provide therapy to neurodiverse couples (Stafford, 2023).

Therapists believed they had the knowledge and skills to provide therapy to a specialized niche in couples therapy that involved individuals with very different neurological perspectives, even without expertise. There is an injustice to the clients who sought to find a qualified therapist with a very specialized skill set specifically for this nascent group and were unaware they may be trusting the judgement of a therapist with little or no specialized training in neurodiversity.

False Authority and Financial Compensation for Expertise

A second issue of questionable ethical practice related to health disparity presented in the form of false authority and billing. Therapists in the *My Process* pathway assumed growing up with a family member with autism or a spouse, child, or self with neurodiversity fostered a deep understanding and connection with neurodiversity. They believed their past experience "uniquely situated" them with specialized insight to counsel neurodiverse couples. This assumption is incorrect. Acquiring various levels of tacit knowledge from past connections with autism is not expertise in neurodiversity. Offering counseling, without specialized training, to neurodiverse couples is misleading. Counseling neurodiverse couples would suggest clients believe their counselor was an expert. *False authority* is the authority presumed, in this case in couples

therapy, by virtue of credentials, even though expertise is lacking (Shatz, n.d.). In other words, practicing with false authority is similar to watching an actor who plays a doctor on TV convince customers they are qualified to give medication advice. A counselor shared this comment about untrained therapists: "it is significant, they do damage because they don't understand... let's say schizophrenia, I would never work with a couple where one partner has schizophrenia, because I'm afraid of making mistakes because I don't know this profile [schizophrenia]" (Participant 10, lines 466–468). Only one therapist accepted insurance; all other therapists charged out of pocket fees for their counseling services. Therapists practicing with a false authority were possibly doing a disservice to couples who were paying out of pocket for expertise. Therapists who practiced with false authority were not implementing researched and evidence-based techniques into their practice. CBT modified for adults with ASD has been used with success in neurodiverse couples therapy, yet no counselor in the *My Process* pathway used any therapy modified for persons with ASD (Gaus, 2019).

Many therapists practicing with false authority used random and often contradictory therapeutic techniques that they chose with little or no rationale. The neurology of autism makes it inherently difficult for clients to convert emotions and thoughts to words, yet many *My Process* pathway therapists offered emotion-based therapy (EBT) as a technique they would use. No therapist from *Trust the Process* pathway offered emotion-based therapy. Generally, EBT is not a recommended therapy for individuals with a neurodevelopmental disorder (Stafford, 2023). Therapists with *Trust the Process* pathway offered similar therapies and used therapies modified for ASD.

Most participants marketed their neurodiverse couples therapy expertise with other therapists through courses, services, support groups, or book sales to the public. Some counselors

published papers in peer-reviewed journals. Most therapists in this study sought financial compensation for their expertise and experience as a counselor for neurodiverse couples through the sale of courses, services, or books. Some courses or services were priced in the thousands of dollars per transaction. Only one therapist took insurance; the majority of the therapists did not take insurance and required self-pay *prior* to the 1-hour therapy sessions. Several therapists discussed how they moved their practice from in-office to online video conferencing for neurodiverse couples, charging between \$250 and \$500 per session. Many shared the costeffectiveness of working from home and decided to work part-time, or they would "pick and choose" when they wanted to work. At the beginning of the study (2020), there were very few therapists who advertised online offering neurodiverse couples therapy. There are now multiple advertisements with various claims of expertise and facts. Not only is this a disparity to couples who need specialized treatment, but it is also an injustice to the patients who put their trust into the belief their therapist has a qualified higher authority skill set and has no idea of the false authority of the counselor who provided and charged them for counseling. Self-pay counseling may be a financial hardship to some neurodiverse couples who need help and seek therapy.

Implications

This study underscores the importance of healthcare professionals, especially those who work with and counsel neurodiverse couples who are in need of building better relationships.

This study highlights the challenges faced by neurodiverse couples and the need for support networks, professionally and socially. The study also illuminates the difficulties and costs faced by people with disabilities to access mental health practitioners and the hardship faced to maintain their health and well-being.

Practice Implications

Mental health professionals practicing with false authority are causing damage to the neurodiverse couple. Psychiatric mental health nurse practitioners, psychologists, and social workers who counsel ND couples need to be certified and well-versed in neurodiversity before providing therapy advice to neurodiverse couples. Counseling associations and certifying agencies need to address the lack of qualified neurodiverse counselors and govern therapists practicing without specialized qualifications. Mental health professionals need to establish standard practice guidelines for neurodiverse couples therapy to prevent harm in the patient counseling environment.

Nursing can play an instrumental part in supporting self-care and teaching the couple skills for self-advocating in the healthcare setting and in their home. Nurses are uniquely qualified to accommodate a care plan to fit the specialized needs and challenges faced by the neurodiverse couple. Nursing can bridge the gap of understanding between the neurodiverse couple and promote a safe environment with empathy and effective communication. Nurses who understand the dynamics between the neurodiverse couple can teach effective tools to maintain a calm environment, reduce stress, and improve communication between the couple. Nurses can support the neurodiverse couples to be actively involved in their therapy (Frye, 2016).

A neurotypical neurology communicating with an individual with a neuroatypical neurology requires patience and understanding, as it can be demanding, exhausting, and carry a risk of burnout for the neurotypical spouse. Nurses can be instrumental in assessing for issues requiring referral to qualified therapists, including psychiatric mental health nurse practitioners.

Research Implications

Studies are needed to look at the long-term effects for neurodiverse couples who received counseling from therapists with little or no autism training. Further research should look at the impact co-morbid disorders have when not properly treated with autism counseling. Mental health professionals need to establish standard practice guidelines for neurodiverse couples therapy to prevent harm in the patient counseling environment. Additional research should study how behaviors are presented in persons with autism who also have co-existing conditions.

Studies could uncover guidelines for therapist assessments to determine underlying co-morbid conditions when a person has autism. There is a need to discover the impact of neurodiverse couples' dynamics on children in the household. Future studies should investigate the prevalence of neurodiverse therapists. Lastly, a comparative study is suggested to look at the differences in practice, therapy styles, and patient outcomes of neurotypical therapists versus neurodiverse therapists.

Health Policy Implications

A compelling consideration supporting the argument for insurance coverage of neurodiverse couples counseling underscores future health policy implications for stakeholders', such as insurance companies', expectation of fiscally astronomical costs if affordable healthcare is not accessible for early intervention. Prevalence rates of autism have increased 22% from 2021 (1 in 44) to a rate of 1 in 36 in 2023 (CDC, 2023). This is a 178% increase from the 2000 rate of 1 in 150. Projected lifetime direct and indirect costs is estimated at \$3.5 million for individuals for a cumulative cost of nearly \$15 trillion by 2029 (Cakir et al., 2020). Insurance coverage has been mandated in all states for diagnosis and treatment of children (National Conference of State Legislatures, 2021). Public pressure will increase as greater numbers of people will be directly

affected by autism as prevalence rates and explosive costs continue to rise. Allowing insurance coverage for early intervention and preventative care will curb higher costs later from exacerbated conditions. Early research is exploring reconceptualizing long-term models of care by using a combination of family interventions, technologies, and long-term support that may have lasting health advantages and cost-effective innovations that may ultimately lead to long-term cost-saving care (Green et al., 2022; Sampaio et al., 2022). It is worth investing in preventative care, early intervention, and research to optimize future economic impact by eliminating barriers to care (Malik-Soni et al., 2021).

The older children are when diagnosed, the greater the development of intensity and severity of physical and mental health difficulties which include co-morbidities when compared with early-diagnosed children (Mandy et al., 2022). There are considerable social and financial costs associated with the diagnosis of autism that become substantially more significant with any increase in complexity of contributing health issues (Cakir et al., 2020; Mandy, 2022; Roddy et al., 2018). Studies have also correlated early diagnosis and intervention with long-term cost-effectiveness (Broder-Fingert, 2021; Tinelli et al., 2023). The United States government has mandated insurance companies to provide insurance coverage to children in every state; however, many states have added restrictions that limit care (National Conference of State Legislatures, 2021). Promoting early diagnosis and evidence-based interventions may provide cost-effective savings for insurance companies in the long term.

Insurance companies have an ethical responsibility to support the mental and emotional well-being of neurodiverse people and their partners. Chronic mental health issues foster chronic emotional stress which will lead to costly long-term physical and mental health issues. Insurance companies need to cover neurodiverse couples therapy to help reduce healthcare costs, promote

well-being for the couple and extended family members, and minimize inevitable chronic stressrelated health problems.

The mental and physical toll on both partners within a neurodiverse relationship could affect workplace performance, resulting in diminished productivity and increased sick time.

Broadly, insurance coverage would contribute to workplace stability and profitability.

Insurance coverage of neurodiverse couples therapy could directly benefit the fiscal bottom-line of insurance companies. Providing coverage for early or prompt intervention can offset the economic and human cost of reasonably assumed accelerating and escalating complexity of future health problems and situations. Potential future issues could require the involvement of other agencies such as police, social workers, or emergency services. Insurance companies could be facing heightened costs of not only conditions related to deteriorating mental or physical health, which plausibly could involve intensive care or other costly specialized care, but also incidental costs related to potential domestic violence, or tangential costs of acquired health issues from other insurance customers (caregiver, neighbor, children) that are the direct or indirect result of an unattended problems.

Health policy needs to consolidate national standards, guidelines, and certification of mental health practitioners prior to providing counseling to neurodiverse couples.

Education Implications

The findings from this study contribute evidence that research-based therapies, protocols, and guidelines need to be developed for individuals in healthcare and peripheral disciplines such as teachers, counselors, caregivers, and police officers. All service providers need varying degrees of knowledge and understanding of the nuanced deficits of a person with a neurodevelopmental disorder and to learn how to interact effectively with neurodiverse couples.

Nursing schools need to offer the fundamentals of understanding and working with neurodiverse colleagues and patients. Nursing graduate programs need to provide higher-level courses of autistic and neurodiverse psychosocial dynamics, neurophysiology, behavior, and communication techniques. This is knowledge nurses will need and use in the workplace, classroom, and socially.

Social Justice Implications

Counselors who charge fees for unqualified expertise need to be accountable to a governing agency. Specialized training needs to be mandated by a national governing therapy association. Health-policy research on outcomes needs to be conducted to entice insurance companies to cover the cost of therapy. A cap on fees would allow affordability for the growing number of adults with autism, access to therapy, and prevent disparities with access to qualified specialty care. These actions can bring equity to care and eliminate disparities for the neurodiverse couple population.

Strengths and Limitations

The limitations of this study are related to a small sample size. The study took place during the COVID pandemic which may have affected participant recruitment, as well as curbed face-to-face interviewing. Participants self-selected to be part of this study and, therefore, there may be elements of therapy that were not discovered but are being used by other therapists.

Strengths included a culturally, chronologically, and experientially diverse group of participants who spanned multiple countries.

Future Research

Future research should study: how behaviors present in persons with autism who also have co-existing conditions; guidelines for counselor assessments for determining underlying co-

morbid conditions when a person has autism; the impact of neurodiverse couples' dynamics on children in the household; the prevalence of neurodiverse therapists; and a comparative look at the differences in practice, therapy styles, and patient outcomes of neurotypical therapists versus neurodiverse therapists.

Conclusion

This study used grounded theory to investigate the social processes mental health practitioners use to provide counseling to neurodiverse couples. The findings suggest that neurodiverse couples who seek mental health and relationship counseling may not be receiving neurodiverse-tailored guidance from a therapist who was specifically educated, mentored, and trained in the field of neurodevelopmental disorders—specifically autism. Nationally credentialled guidelines for neurodiverse counseling have not yet been established, and a nationally recognized certification program through a licensing or credentialing agency for training professionals using evidence-based techniques has not been established. At the moment, any licensed therapist can claim to be an expert in neurodiverse counseling. The counseling paradigms were found to be consistently inconsistent on one pathway and consistent on the research-guided pathway. It is important to conduct more research to understand the impact on neurodiverse couples and individuals who receive mental health counseling from non-autism-informed practitioners.

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APPENDIX



Cdleged Nursing

RESEARCH STUDY SEEKING PARTICIPANTS

MENTAL HEALTH PROFESSI ONALS WHO COUNSEL NEURODI VERSE COUPLES



*The Research
~ To investigate how
mental health
professionals counsel
neurodiverse couples

*Who is Eligible?

- ~ Licensed mental health professional, Nurse
 - Practitioners, Psychologists
- ~ Who specialize in adult neurodiverse relationships
- ~ English Speaking
- ~ Practicing in continental United States
- Mental health counseling/therapy experience > 1 year.

- *Requirements
- ~ Zoom or phone interview 60-90 min.
- ~ Possible follow-up interview

*This dissertation study will enroll 10-20 participants.
This study has been determined to be exempt per WSU IRB Guidelines



MENTAL HEALTH PROFESSI ONALS WHO COUNSEL NEURODI VERSE COUPLES

RESEARCH STUDY PARTICIPATION AGREEMENT

 This agreement relates to your participation in a Washington State University College of Nursing research study to better understand how mental health professionals counsel neurodiverse couples. You understand the purpose of this study, have no objections and voluntarily agree to participate in this study. You understand that participation involves answering questions in a zoom interview (or phone interview) that may last between 60 to 90 minutes.
 You understand that the Zoom/ phone interview will be recorded for transcription purposes only.
You understand a short follow-up interview may be needed after the initial interview has been completed to clarify or expand on some aspects discussed during the interview. If so, a time and date will be set based on your convenience.
☐ You understand the interview will be recorded; a transcript will be made from the recording with all personal identifying information removed. Once the transcript is verified accurate, the recording will be destroyed promptly.
 You understand that the participant's client confidentiality should be respected and personally identifying information about the participant's clients should not be disclosed during the interview. You understand that even if you agree to participate now, you can withdraw at any time or refuse to answer any question without
reprisal or consequence. You understand that you will not be compensated and will not benefit directly from participating in this research.

APPENDIX C: DEMOGRAPHIC DATA FORM

Washington State University College of Nursing

Demographic Data Form

Thank you for your interest in participating in this research study. As a participant, you will be participating in an interview that may last 60–90 minutes. This research study is examining the social process(es) therapists use to generate, develop, and provide therapy for neurodiverse couples.

neurodiverse couples.
Age:
Gender you identify with:
Ethnic Heritage (you identify with):
Highest level of education:
Years practicing as a therapist:
Professional specialty:
Years providing therapy to neurodiverse couples:
What is your experience with neurodevelopmental disorders?
Licensed and currently practicing in the continental United States: YesNo
Credentials/License

APPENDIX D: SEMI-STRUCTURED INTERVIEW GUIDE

Think about what the Process is that they are using?

Semi-Structured Interview Question Guideline/Template

Warm-up

- 1. Tell me about yourself. How/why did you develop an interest in working with neurodiverse couples?
- 2. What would you say is your greatest strength or passion with regard to counselling skills?
- 3. In your opinion and experience, what are these couples like?

Overarching Research Aim (How do mental health professionals counsel neurodiverse couples?)

- 4. Could you describe an example of a typical couple and how you work with them from the first time they come to you to their last visit.
- 5. Do you use a formal or informal approach when working with neurodiverse couples?

Research Question (What social process(es) does the mental health professional use to generate, develop and provide therapy to neurodiverse couples?) (Prompting questions that follow the first open-ended question. Some prompt questions might not be included in the interview process.

- 6. After the first consultation, what factors are considered when creating an initial 'roadmap' to counsel neurodiverse clients?
- 7. What strategies, thoughts or practices have you found helpful when engaging with your clients?
- 8. What have you found with respect to short-term or long-term benefits of therapy for your neurodiverse clients?
- 9. And which therapeutic technique(s) help to achieve the benefit(s)?
- 10. What has been your experience with difficulties or barriers to providing therapy to neurodiverse clients?
- 11. Do you offer the couples individual sessions or only sessions as couples? How does that work?
- 12. Tell me about your experience with communication or connecting with each partner.
- 13. Tell me about any compelling realization(s) that have come to your attention during the duration of therapy with neurodiverse couples. Any 'Aha' moments?
- 14. What have you learned over time from working with these couples?
- 15. Are there any therapeutic strategies that are not helpful when counseling neurodiverse couples?
- 16. For you, how is a successful outcome identified or measured?
- 17. How do you know if counseling is working or not working with the couple?
- 18. What do you do to keep them engaged on the one hand, or tell them it isn't working on the other?