



Title: The neurodiversity paradigm: Exploring the factors influencing Educational Psychologists' attitudes and practices.

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Abstract

Background: The neurodiversity paradigm (NP) and the Neurodiversity Movement (NM) have called for a shift away from traditional notions of pathologising neurological differences, such as autism, to instead embracing the diverse neurological profiles that individuals exhibit.

Aims: The study aimed to explore factors influencing educational psychologists' (EPs') attitudes towards the NP, NM, and neurodiversity-affirmative practice. It also aimed to identify factors influencing their professional practices and the prevailing neurodiversity-affirmative practices EPs apply when supporting Autistic children and young people (CYP).

Sample: The sample included EPs supporting Autistic CYP in Irish disability and school psychology services. A total of 12 EPs participated in semi-structured interviews conducted online.

Methods: The study adopted a qualitative design comprising semi-structured interviews. A realist approach to thematic analysis (TA) (Wiltshire & Ronkainen, 2021) was employed to analyse the interview data.

Results: The study explored the affective, behavioural, and cognitive components as themes that shaped EPs' attitudes. Subthemes identified in the affective domain reflected EPs' ethical concerns about traditional behavioural approaches, discomfort with the divisive nature of the NM, and differing confidence levels in using neurodiversity-affirmative practices. Learning experiences, reflective practices, and ineffective approaches were identified as subthemes influencing the behavioural domain of attitudes. At the same time, variations in knowledge of the NP and opinions on the NM were identified as subthemes in the cognitive domain. Results also highlighted shifts in EP's adapting to neurodiversity-affirmative practices within assessments, consultations, interventions, and language. EPs perceived autonomy over their practice, enabling adherence to neurodiversity-affirmative approaches. They reflected varied perceptions of colleagues' practices and were hopeful of acceptance from the Autistic community.

Conclusions: This study demonstrates the multifaceted nature of EPs' attitudes towards the NP and NM and emphasises the need for professional development. It also calls for further robust research on the potential outcomes of neurodiversity-affirmative approaches in supporting Autistic CYP.

Declaration

I hereby declare that the work presented in this thesis is my own. Where other sources have been noted, they have been clearly acknowledged as references.

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Date: 3/5/2024

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Abbreviations

| | |
|-------|---------------------------------------------------------------------|
| ABA | Applied Behavior Analysis |
| ADDM | Autism and Developmental Disabilities Monitoring |
| ADHD | Attention-Deficit/Hyperactivity Disorder |
| ADI-R | Autism Diagnostic Interview-Revised |
| ADOS | Autism Diagnostic Observation Schedule |
| AON | Assessment of Need |
| APA | American Psychological Association/American Psychiatric Association |
| ASD | Autism Spectrum Disorder |
| BPS | British Psychological Society |
| CAMHS | Child and Adolescent Mental Health Service |
| CBT | Cognitive Behavioral Therapy |
| CDC | Centers for Disease Control and Prevention |
| CDNT | Children's Network Disability Team |
| CPD | Continuing Professional Development |
| CPS | Collaborative and Proactive Solutions |
| CYP | Children and Young People |
| DCD | Developmental Coordination Disorder |
| DISCO | Diagnostic Interview for Social and Communication Disorders |
| DoE | Department of Education |
| DoH | Department of Health |
| DSM | Diagnostic and Statistical Manual of Mental Disorders |
| EP | Educational Psychologist |
| HSE | Health Service Executive |
| ICD | International Classification of Diseases |
| JBI | Joanna Briggs Institute |
| MDT | Multi-Disciplinary Team |

| | |
|-------|----------------------------------------------------|
| MIC | Mary Immaculate College |
| MIREC | Mary Immaculate Research Ethics Committee |
| NAS | National Autistic Society |
| NCSE | National Council for Special Education |
| NDBI | Naturalistic Developmental Behavioral Intervention |
| NEPS | National Educational Psychological Service |
| NICE | National Institute for Health and Care Excellence |
| NM | Neurodiversity Movement |
| NP | Neurodiversity Paradigm |
| PCC | Population Concept Context |
| PCP | Primary Care Psychology |
| PDD | Pervasive Developmental Disorder |
| PDS | Progressing Disability Services |
| PSI | Psychological Society of Ireland |
| QoL | Quality of Life |
| RQ | Research Question |
| SEED | Scottish Executive Education Department |
| TA | Thematic Analysis |
| TPB | Theory of Planned Behaviour |
| WHO | World Health Organization |

1 Introduction

This introductory paper provides a brief overview of the research area. The different models of services that employ educational psychologists (EPs) are discussed. The researcher's positionality and the theoretical frameworks that were applied are outlined. Finally, an overview of the thesis layout is detailed in accordance with research guidelines provided by Mary Immaculate College (MIC).

1.1 Research Area

In recent years, there has been a profound paradigm shift in society's understanding of autism. Through a medical lens, autism was viewed as a disorder that needed to be cured (Pellicano & den Houting, 2022). The understanding of autism has since expanded to incorporate a social model perspective. This shift highlights environmental barriers that contribute to challenges faced by Autistic individuals (Dwyer, 2022). More recently, there has been a growing acceptance of the neurodiversity paradigm, which is still in its infancy and emphasises autism as a natural variation in human cognition. This progression underscores a broader recognition of autism as a neurological difference within society (Walker, 2021). Consequently, the choice to capitalise "Autistic" reflects a commitment to recognise autism as an inherent aspect of one's identity, rather than a condition to be separated from the individual. Additionally, throughout this thesis, the Autistic community, refers to "a community of people who are all Autistic, and of all ages" (Hartman et al., 2023, p.17).

Neurodiversity is an umbrella term that considers the unique neuro-cognitive variability of humankind (Singer, n.d.). Neurodiversity moves away from conventional notions of pathologising neurological differences to embrace individuals' diverse neurological profiles instead (Singer, 1998). The neurodiversity paradigm (NP) is a "specific perspective on neurodiversity" (Walker, 2021, p. 31). This paradigm believes that human diversity is natural and valuable and claims there is no one 'normal' or 'typical' neurology (Walker, 2021). The NP also provides a philosophical foundation for activists of the Neurodiversity Movement (NM) (Walker, 2021).

The Autistic community initiated the NM as a social justice movement to challenge deficit-based perceptions and instead to advocate for the rights, equality, respect, and inclusion of neurodivergent individuals (Singer, n.d.; Walker, 2021). Neurodivergent individuals are considered to have "a mind that functions in ways which diverge

significantly from the dominant societal standards of normal” (Walker, 2021, p. 32). Neurodivergent individuals may have neurodevelopmental difficulties such as Autism, Attention Deficit/Hyperactivity Disorder (ADHD), Dyslexia, Dyscalculia, and Developmental Coordination Disorder (DCD). Neurotypical individuals have neurocognitive functions that are within what society claims as ‘normal’ and are considered the opposite of neurodivergent (Walker, 2021). Although the Autistic community is embracing the NM, there have been some criticisms. For instance, critics argue that the NM does not represent those with significant support needs, such as intellectual disabilities and non-speaking individuals (Hughes, 2020)

Neurodiversity-affirmative practices are based on the principles of the neurodiversity paradigm and goals that are advocated for within the Neurodiversity Movement. Neurodiversity-affirmative practice includes practices that frame autism from a disorder to a neurotype, which does not pathologise Autistic ways of being (Hartman et al., 2023). It provides support for the specific needs of Autistic individuals without attempting to normalise their features or conform them to neurotypical standards (Aitken & Fletcher-Watson, 2022; Hartman et al., 2023) while prioritising improvements in quality of life (QoL) outcomes (Leadbitter et al., 2021). Neurodiversity-affirmative practices value individual strengths, support challenges, and accept differences in communication, social interaction, behaviour and learning (Dundon, 2024). There are several advantages to adopting a neurodiversity-affirmative approach. It is, first and foremost, an approach that offers support to Autistic people’s support needs without attempting to reduce Autistic ways of being through attempting to ‘normalise’ Autistic ways of being or to try to make the individual "fit into" a neurotypical (Aitken & Fletcher-Watson, 2022; Hartman et al., 2023). Neurodiversity-affirmative approaches have evolved due to Autistic advocacy, which considers Autistic voices, respects Autistic culture and identity, and recognises there is value in diversity and living a disabled life (Hartman et al., 2023). However, the neurodiversity paradigm is still in its early stages, and more research and development are likely needed to fully understand and implement these approaches as solid evidence-based practices. This poses challenges for EPs, who are considered scientist-practitioners relying on established evidence-based practices (Fallon et al., 2010).

Chapman (2020) describes the NP as a moving target, as it evolves over time in response to societal and cultural influences, as well as interactions between neurodivergent and neurotypical individuals. According to Chapman, the NP will mean “different things at

different times” (Chapman, 2020, p. 219). As the definitions of neurodiversity have evolved over the past number of years, this has caused individuals to create their own meanings (Chapman, 2020; Dwyer, 2022; Singer, n.d.). Therefore, the term 'neurodiversity' has evolved significantly over time, resulting in varied interpretations among individuals. This varied understanding of the NP could lead to diverse interpretations and attitudes among professionals and the general public alike.

Previous research has demonstrated that the age of an Autistic individual has been shown to influence clinicians' formulation on whether they view autism as a deficit or difference (Turowetz et al., 2023). Clinicians tended to view younger Autistic children primarily through a deficit-focused lens, whereas older Autistic children may be seen as exhibiting social-cognitive differences, though deficits may also be considered (Turowetz et al., 2023). Other research demonstrates that professionals' attitudes can influence parental support during autism assessments (Makino et al., 2021) and the lives of neurodivergent individuals (Sonuga-Barke & Thapar, 2021). In addition, psychotherapists were found to be aware of the NM. Still, they required more knowledge to build neurodiversity-affirmative principles into their practice (Garrett, 2022).

In Ireland, EPs work across education and healthcare settings to support Autistic children and young people (CYP). EPs work within disability services, known as Children's Disability Network Teams (CDNTs), the school psychology service, known as the National Educational Psychological Service (NEPS), and child psychology services, which include Primary Care Psychology (PCP) and Child and Adolescent Mental Health Services (CAMHS) (Health Service Executive [HSE], 2016). Within the Irish context, professional practice guidelines for assessment and diagnosis of autism are informed by recent guidance published by the Psychological Society of Ireland (PSI). The PSI's 'Guidance for the Assessment, Formulation, and Diagnosis of Autism in Children and Adolescents' promotes professional practice based on the NP during assessment, formulation and when diagnosing autism (PSI, 2022). These are the only professional guidelines for psychologists in Ireland that address neurodiversity-affirmative practice when supporting neurodivergent CYP. Additionally, the Department of Education (DoE) published 'Autism Good Practice Guidance for Schools - Supporting Children and Young People.' This guidance was developed by a working group from NEPS, the National Council of Special Education (NCSE), the DoE's Inspectorate, and the Middletown Centre for Autism (DoE, 2022b). Interestingly, although

these guidelines were recently published, they do not mention using a neurodiversity-affirmative approach when supporting Autistic CYP.

Internationally, there has been an increase in the prevalence of autism, which is believed to be due to increased understanding and an increase in the number of underdiagnosed populations being diagnosed, as well as the change in diagnostic criteria (Hodges et al., 2020; Russell et al., 2022; Zeidan et al., 2022). This increase in prevalence rates is causing more need for autism assessments. For instance, the HSE received 7,612 new Assessment of Needs (AON: a statutory process under the Disability Act, 2005) between June 2022-2023, an increase of 20% (HSE, 2023b).

It is, therefore, timely to investigate how EPs navigate the changing landscape of the NP and NM. Therefore, this research aimed to explore the factors that influence EP's attitudes towards the NP, NM, and neurodiversity-affirmative practices, as well as exploring current neurodiversity-affirmative practices that EPs use. Therefore, the specific research questions investigated in this study are outlined below:

1. What factors influence EPs' attitudes towards the NP, the NM, and neurodiversity-affirmative approaches?
2. What are the prevailing neurodiversity-affirmative practices used amongst EPs?
3. What factors influence EPs' professional practices?
4. What barriers impede the use of neurodiversity-affirmative practices?

It is hoped that these research findings will offer insights into neurodiversity-affirmative approaches that positively impact Autistic CYP and identify further developments required in policy, practice, and research.

1.2 Researcher's Positionality

During my Professional Doctorate in Educational and Child Psychology, I worked in many services in Ireland that support Autistic CYP. While undertaking a placement in children's disability services, I observed my supervisors trying to shift their work to become more neurodiversity affirmative. Because of this experience, I attended webinars about the neurodiversity-affirmative paradigm within children's services in Ireland that the PSI delivered. These webinars aimed to support psychologists in carrying out neurodiversity-affirmative autism assessments and interventions using a strengths-based approach and discussed the most appropriate language to use when supporting neurodivergent individuals.

Over the last two years, my personal views about the NP and professional practices have shifted to more neurodiversity-affirmative and strengths-based. I believe that the NM includes all neurodivergent individuals and does not overlook individual challenges. Additionally, I believe the NP does not reject needs but accepts that neurodivergent individuals experience challenges and have their own individual strengths.

Notably, I understand that the field of neurodiversity is relatively new and evolving. As such, my research is situated within a developing paradigm. I acknowledge that ongoing research and development will likely continue to refine and expand our understanding of neurodiversity and neurodiversity-affirmative practices. Embracing the tentative nature of this field, I am committed to contributing to this evolving dialogue and remain open to emerging insights and practices.

1.3 The Ontological and Epistemological Position of the Researcher

The researcher employed a critical realist approach (Bhaskar, 1975) to this research study. From the philosophical viewpoint of critical realism, there is a distinction between the ‘real’ and the ‘observable’ worlds (Bhaskar, 1975). Critical realism asserts the existence of an independent reality that is separate from human knowledge and encounters, and this reality is comprehensible, albeit to a limited and imperfect extent (Bhaskar, 1975). In critical realism, reality is conceptualised as a complex and stratified hierarchy of open systems, which include the empirical, the actual, and the real domains (Haigh et al., 2019). Taking a critical realist position allows qualitative researchers to use what is considered the ‘middle ground’ between positivism and constructionism, as it considers ontological realism and epistemological relativism (Willis, 2023). This research uses a critical realist paradigm to explore the social structures that influence EPs’ practices when supporting Autistic CYP and apply the three domains of the critical realist stratified reality. For instance, surface-level attitudes and professional practices, underlying structures and mechanisms that influence EP’s attitudes, and causal mechanisms that influence observable/non-observable events.

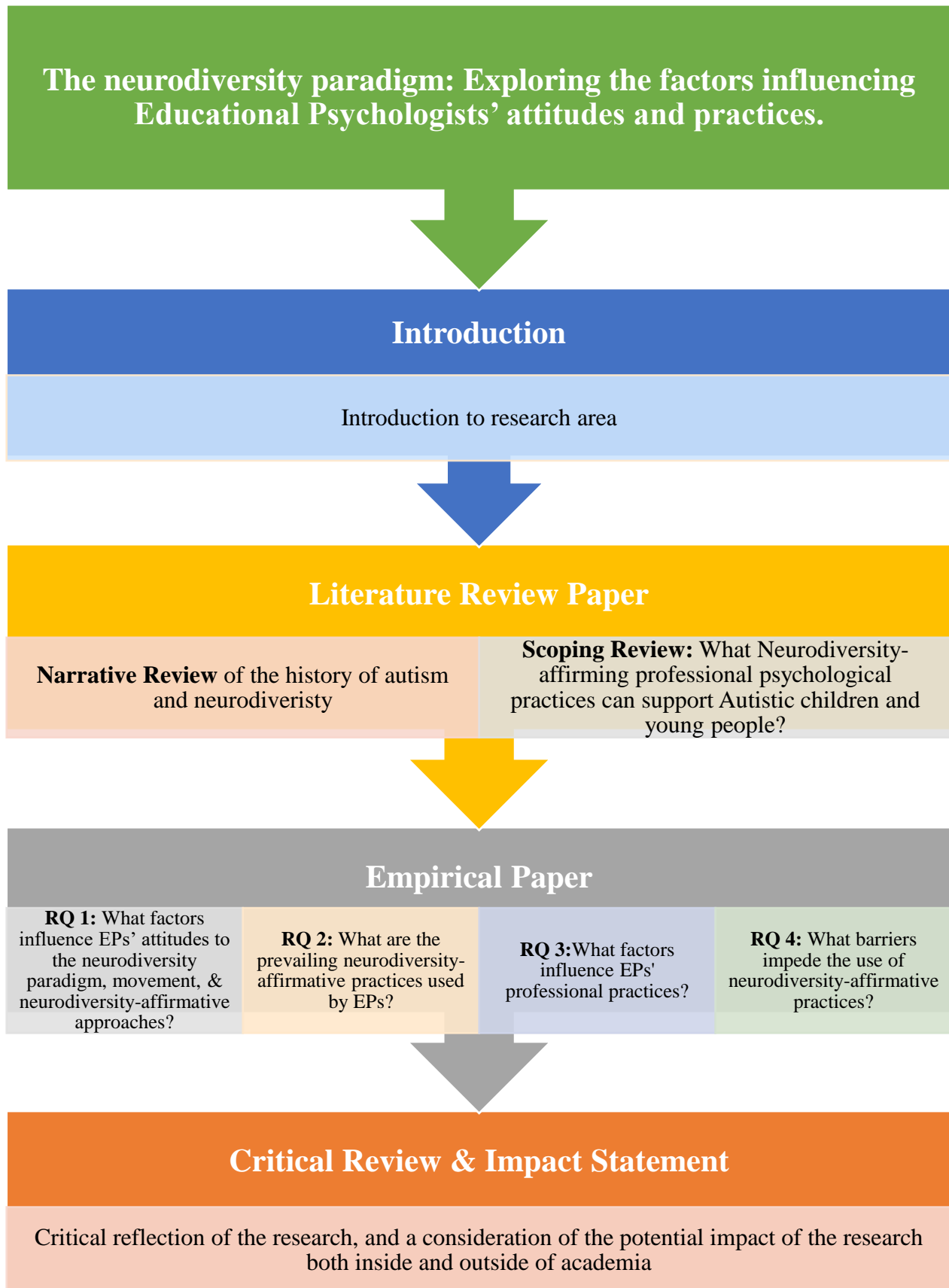
1.4 Theoretical Frameworks

The theoretical frameworks applied for the research study were the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007) and the Theory of Planned Behaviour (TPB; Ajzen, 1991). The Multicomponent Model of Attitudes suggests that attitudes are developed due to affective, behavioural, and cognitive components (Eagly & Chaiken, 2007). The TPB suggests that an individual's attitude, perceived subjective norms, and perceived

behavioural control independently determine behavioural intentions, influencing their behaviour (Ajzen, 1991). Both these theoretical frameworks were appropriate for this study due to their explanations of the causal mechanisms of attitudes and behaviour formation, which fits with the critical realist perspective.

1.5 Overview of Thesis Layout

The current thesis is organised following the guidelines set from MIC and consists of three components: a Review Paper, an Empirical Paper, and a Critical Review and Impact Statement. The Review Paper consists of a scoping review conducted to identify the types of evidence available and characteristics of neurodiversity-affirming practices that support Autistic CYP. The Empirical Paper details a report on the research conducted to address the research questions. The format is similar to traditional research articles. It includes an introduction to the research area, a methodology overview, a presentation of study results, and a subsequent discussion. The Critical Review Paper and Impact Statement provide a forum for critical reflection on the research and consideration of the potential impact of the research within academia and the field of educational psychology. Figure 1.1 provides a visual map of the layout of this thesis.

Figure 1.1*Visual Map of Thesis Layout*

2 Literature Review

2.1 Introduction

This review begins by discussing autism and assessment and intervention approaches that are used by psychologists to support Autistic children and young people (CYP). Autism is a neurodevelopmental difference that is characterised by variations in social interaction, communication, and behaviour (Lord et al., 2018). Over the past 80 years, our understanding of autism has evolved significantly. Initially, autism was predominantly viewed through the lens of the medical model, which pathologised neurological differences and aimed to diagnose and treat autism as a disorder that needed to be ‘cured’ (Pellicano & den Houting, 2022). More recently, there has been a notable shift in perspective towards the neurodiversity paradigm (NP), which challenges the traditional medical model's perspective. The NP considers autism as a natural variation of neurocognitive functioning, emphasising the need to for acceptance and accommodation rather than normalization and cure (Walker, 2021). This paradigm shift has sparked a reevaluation of assessment and intervention practices, aiming to support Autistic individuals in ways that respect their unique strengths and differences.

Despite this shift, empirical evidence-based practices specifically aligned with the NP for supporting Autistic CYP remain limited in the literature. To address this gap, a scoping review was conducted to identify suggested neurodiversity-affirmative psychological practices for supporting Autistic CYP. This review explored suggested neurodiversity-affirmative approaches in terms of assessment, intervention, and therapy. From this, implications for practice and research will be considered.

2.2 Autism

Autism Spectrum Disorder, which will be referred to as ‘autism’ for the remainder of this thesis, is a neurodevelopmental difficulty which affects an individual throughout their life (Liu, 2018). Autism is defined as social and communication challenges and repetitive and unusual sensory-motor behaviours (Lord et al., 2018). These differences are due to the Autistic brain's different functions, such as information processing, sensory sensitivity, integration, and communication (Liu, 2018). These neurological differences lead to social communication and behavioural differences compared to neurotypicals (Liu, 2018). Autism is considered heterogeneous, as different Autistic people can present differently (Hollin, 2017). Individuals can be diagnosed with autism from 18-24 months, during which time

characteristics of an Autistic developmental trajectory become clearer (Zeidan et al., 2022). No single cause of the difficulty has been found. However, genetic, and environmental factors can affect the developing brain, which can lead to autism (Bai et al., 2019; Hodges et al., 2020; Kim & Leventhal, 2015). The concept of autism has changed considerably over the past century until now, and a brief history of autism is described in Table 2.1.

Table 2.1

Brief History of Autism

| Brief History of Autism | |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1908 | The concept of ‘Autism’ was first used by German psychiatrist Eugen Bleuler to describe a symptom found in severe cases of schizophrenia (Evans, 2013). Autistic thinking was viewed as a psychiatric disorder which caused a marked detachment from reality (Evans, 2013). |
| 1943 | Leo Kanner described the term ‘early infantile autism’ in his paper, which included 11 children (Kanner, 1943). Kanner observed that these children were intelligent and presented with two main features: significant difficulties in social interaction and resistance to change (Kanner, 1943). These children also presented with repetition of movements and vocalisations (Kanner, 1943). Kanner noted that these features were different to childhood schizophrenia as the challenges associated with autism were present since birth. In contrast, children with schizophrenia usually had typical development (Kanner, 1943). |
| 1944 | Hans Asperger described a group of children that presented similarly to those in Kanner’s research. However, Asperger described as a milder form of autism (Cook & Willmerdinger, 2015). Instead of presenting with echolalia, the children were observed to talk like ‘grown-ups,’ causing Asperger to describe them as ‘little professors’ (Hartman et al., 2023). As Asperger’s work was published in German, it remained essentially unknown until its English translation, which led to Lorna Wing in 1981, proposing Asperger’s as a subgroup of autism (Barahona-Corrêa & Filipe, 2016). |
| 1979 | Wing and Gould pioneered the first epidemiology study of autism, which found a higher prevalence rate than previously thought (Wing & Gould, 1979). They also proposed a ‘triad of impairments,’ which included differences in social interaction, communication, and imagination (Wing & Gould, 1979). These social interaction and communication features proposed by Wing and Gould (1979) were aligned with Kanner’s and Asperger’s research. The characteristics of imagination included restrictions/repetitions of behaviour and differences in the style of play (Wing & Gould, 1979). Wing (1975) also proposed the concept of autism being heterogeneous and being on a ‘spectrum’ dimensionality by recognising the diverse and multifaceted nature of autism amongst individuals. |

| | |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1980 | The Diagnostic and Statistical Manual of Mental Disorders (DSM-III) (3rd ed. American Psychiatric Association [APA], 1980) included ‘infantile autism,’ which was described as a pervasive developmental disorder (PDD) that was distinct from schizophrenia. |
| 1987 | DSM-III-R infantile autism was replaced by ‘autism disorder’ (3rd ed., revised. APA, 1987). This made the diagnosis more flexible and used across different age ranges and developmental levels (Siegel et al., 1988). The diagnostic criteria covered three domains: i) qualitative impairments in reciprocal social interaction, ii) impairments in communication, and iii) restricted interests/resistance to change and repetitive movements (APA, 1987). |
| 2000 | The DSM-IV-TR then classified PDD into discrete subcategories, which included Autistic Disorder, Asperger’s Disorder, PDD-Not Otherwise Specified, Rett Disorder, and Childhood Disintegrative Disorder (APA, 2000). |
| 2013 | The DSM-5 merged subcategories of Autistic Disorder, Asperger’s Disorder, and PDD-Not Otherwise Specified into a single diagnostic criterion of Autism Spectrum Disorder and eliminated Rett Disorder and Childhood Disintegrative Disorder. This change caused professionals to view autism as a spectrum on a continuum of differing severity levels (APA, 2013; Lobar, 2016). The DSM-5 also changed the diagnostic criteria to only two domains: i) persistent deficits in social communication and interaction and ii) restricted, repetitive patterns of behaviour, interests, or activities (APA, 2013). |

2.2.1 *Diagnostic Criteria*

Today, professionals use two main classification systems when assessing and diagnosing autism. These are the Diagnostic and Statistical Manual of Mental Disorders (5th ed., text rev.; DSM-5-TR; APA, 2022) and the International Classification of Diseases 11th Revision (ICD-11) (World Health Organization [WHO], 2022). Within the two diagnostic classifications, autism is described as a neurodevelopmental disorder in which an individual experiences ‘persistent deficits’ (Pellicano & den Houting, 2022). The DSM-5-TR and ICD-11 diagnostic criteria are displayed in Table 2.2.

2.2.1.1 Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR). The DSM-5-TR (APA, 2022) diagnostic criteria for autism is the presence of two characteristics: i) “persistent deficits in social communication and social interaction across multiple contexts” (APA, 2022, p. 56), and ii) “restricted, repetitive patterns of behavior, interests, or activities” (APA, 2022, p. 56). Additionally, Autistic characteristics must be present during early development, which are not better explained by an intellectual disability and cause a significant impact on an individual’s functioning (APA, 2022). The DSM-5-TR also includes

three severity levels which are based on the level of the individual's functioning and level of support need (APA, 2022).

2.2.1.2 International Classification of Diseases (ICD-11). The ICD-11, published by WHO (2022), has combined previous diagnostic categories of childhood autism, atypical autism, and Asperger's syndrome into a broad diagnosis of 'Autism Spectrum Disorder', similar to and more in line with the DSM-5 (Gaebel et al., 2017; Joon et al., 2021). The ICD-11 has also included criteria for autism with and without intellectual disability and functional language impairment, which captures the full range of presentations on the spectrum (Reed et al., 2019).

Table 2.2

DSM-5-TR and ICD-11 Diagnostic Criteria for Autism

| DSM-5-TR | ICD-11 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by all of the following, currently or by history:</p> <ul style="list-style-type: none"> - Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions. - Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication. - Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative | <p>Persistent deficits in initiating and sustaining social communication and reciprocal social interactions that are outside the expected range of typical functioning given the individual's age and level of intellectual development. Specific manifestations of these deficits vary according to chronological age, verbal and intellectual ability, and disorder severity. Manifestations may include limitations in the following:</p> <ul style="list-style-type: none"> - Understanding of, interest in, or inappropriate responses to the verbal or non-verbal social communications of others. - Integration of spoken language with typical complimentary non-verbal cues, such as eye contact, gestures, facial expressions and body language. These non-verbal behaviours may also be reduced in frequency or intensity. - Understanding and use of language in social contexts and ability to initiate and sustain reciprocal social conversations. - Social awareness, leading to behaviour that is not appropriately |

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| <p>play or in making friends; to absence of interest in peers.</p> <p>B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history:</p> <ul style="list-style-type: none"> - Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypes, lining up toys or flipping objects, echolalia, idiosyncratic phrases). - Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day). - Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests). - Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment (e.g. apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement). <p>C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).</p> <p>D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.</p> <p>E. These disturbances are not better explained by intellectual developmental</p> | <p>modulated according to the social context.</p> <ul style="list-style-type: none"> - Ability to imagine and respond to the feelings, emotional states, and attitudes of others. - Mutual sharing of interests. - Ability to make and sustain typical peer relationships. <p>Persistent restricted, repetitive, and inflexible patterns of behaviour, interests, or activities that are clearly atypical or excessive for the individual's age and sociocultural context. These may include:</p> <ul style="list-style-type: none"> - Lack of adaptability to new experiences and circumstances, with associated distress, that can be evoked by trivial changes to a familiar environment or in response to unanticipated events. - Inflexible adherence to particular routines; for example, these may be geographic such as following familiar routes, or may require precise timing such as mealtimes or transport. - Excessive adherence to rules (e.g., when playing games). - Excessive and persistent ritualized patterns of behaviour (e.g., preoccupation with lining up or sorting objects in a particular way) that serve no apparent external purpose. - Repetitive and stereotyped motor movements, such as whole body movements (e.g., rocking), atypical gait (e.g., walking on tiptoes), unusual hand or finger movements and posturing. These behaviours are particularly common during early childhood. - Persistent preoccupation with one or more special interests, parts of objects, or specific types of stimuli (including media) or an unusually strong attachment to particular objects (excluding typical comforters). |
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disorder (intellectual disability) or global developmental delay. Intellectual developmental disorder and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual developmental disorder, social communication should be below that expected for general developmental level.

- Lifelong excessive and persistent hypersensitivity or hyposensitivity to sensory stimuli or unusual interest in a sensory stimulus, which may include actual or anticipated sounds, light, textures (especially clothing and food), odors and tastes, heat, cold, or pain.

The onset of the disorder occurs during the developmental period, typically in early childhood, but characteristic symptoms may not become fully manifest until later, when social demands exceed limited capacities.

The symptoms result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning. Some individuals with Autism Spectrum Disorder are able to function adequately in many contexts through exceptional effort, such that their deficits may not be apparent to others. A diagnosis of Autism Spectrum Disorder is still appropriate in such cases.

2.2.2 Prevalence of Autism

The Centre of Disease Control and Prevention (CDC) Autism and Developmental Disabilities Monitoring (ADDM) Network in the United States found that 1 in 36 children were identified as Autistic (Maenner et al., 2023). In a recent systematic review of the prevalence of autism worldwide, approximately 1/100 children were diagnosed with autism (Zeidan et al., 2022). This figure is similar to the prevalence rates worldwide published on the WHO's database (WHO, 2023). The European Autism Information System project stressed the lack of data on the prevalence of autism in Europe (Boilson et al., 2016). In Ireland, there is no single database to report the prevalence rates of autism (Department of Health [DoH], 2018). In Ireland, it has been estimated that the prevalence of autism was 1.5% of the population. However, other jurisdictions, such as Northern Ireland, which have more recently reported statistics, report a higher prevalence (Houses of Oireachtas, 2023). In one research study, a proportion of Irish school-aged children were screened, and it was found that the prevalence of autism was 1% (Boilson et al., 2016). Within the education system, the National Council for Special Education (NCSE) reported that approximately 1.55% (i.e.,

14,000 students) of school children have a diagnosis of autism (NCSE, 2016). 86% of these students were enrolled in mainstream schools, where 63% attended mainstream classes, and 23% attended an autism class within a mainstream school (NCSE, 2016). 14% of Autistic students were reported to be enrolled in a special school (NCSE, 2016). A yearly increase in the prevalence of school-aged Autistic children has been reported in Northern Ireland since 2008/2009 (DoH, 2021). In Northern Ireland, there is a 4.5% prevalence rate of autism for school-aged children in 2020/2021, which is a 0.3% increase from the previous year.

The CDC reported that boys were 3.8 times more likely to be Autistic than girls (Maenner et al., 2023). Similar to international data, school-aged males in Northern Ireland were three times more likely than females to be diagnosed with autism (DoH, 2021). Autistic characteristics in females have been found to be more subtle and socially acceptable due to social camouflaging (Corcadden & Casserly, 2021). This can lead to females being misdiagnosed or receiving a later diagnosis than Autistic males (Hodges et al., 2020; Lai et al., 2015).

The increase in the prevalence of autism is likely due to several factors. Firstly, the broadening of the diagnostic criteria in 2013 viewed autism as a ‘spectrum’ and combined previously separate diagnoses into one – ‘autism spectrum disorder’ (Hodges et al., 2020; Zeidan et al., 2022). It is suggested that the change in diagnostic criteria may have allowed individuals with ‘less severe autism’ to be diagnosed (Russell et al., 2022; Zeidan et al., 2022). Secondly, there is an increase in the number of underdiagnosed populations being diagnosed, such as females, adults, and ethnic minorities (Russell et al., 2022; Zeidan et al., 2022). This may lead to more conversations and community awareness about autism diagnosis, which influences others to be assessed (Russell et al., 2022; Zeidan et al., 2022).

2.2.3 *Theories of Autism*

Table 2.3 presents various theories used to understand autism, ranging from historical psychoanalytic perspectives to cognitive theories.

Table 2.3

Theories of Autism

‘Refrigerator Mother’ theory (Bettelheim, 1967)

Bruno Bettelheim, an Austrian psychologist, popularised the psychoanalysis theory of the ‘refrigerator mother’ theory, which proposed that ‘cold’ parenting was the cause of autism, which gained prominence in the mid-20th century (Bettelheim, 1967). This caused parents, especially mothers, to be shamed and for children to be removed from their home

environments and put into institutions (Cook & Willmerdinger, 2015; Hartman et al., 2023). Throughout the 1980s-1990s, psychoanalytic theories such as the ‘refrigerator mother theory’ were dismissed, and cognitive theories that viewed autism as an expression of a ‘primary cognitive deficit’ were favoured (Vivanti & Messinger, 2021).

Central Coherence (Frith, 1989)

Central coherence is “the natural human tendency to draw together several pieces of information to construct higher-level meaning in context” (Frith & Happé, 1994, p. 121). Central coherence considers both global and contextual processing. Global processing, for example, is the “ability to see the forest for the trees” (Vermeulen, 2015, p. 2). In contrast, contextual processing is “to use the forest in order to quickly recognize the trees as trees (and not as something else), in other words, to take context into account when giving meaning” (Vermeulen, 2015, p. 2). The central coherence hypothesis suggests that Autistic individuals have a difference in perceptual-cognitive style, which causes them to have difficulty seeing the ‘bigger picture’ (Frith, 1989). This may cause Autistic individuals to over-focus on smaller or less relevant details and have trouble recognising the situation's implicit, hidden, or unspoken significance (Frith, 1989).

Theory of Mind (Baron-Cohen, 1990)

Theory of mind is the ability to understand others' mental states, including their thoughts, desires, intentions, and emotions (Baron-Cohen, 1990). This theory suggests that Autistic individuals experience difficulty with Theory of Mind, which causes challenges with social communication and interaction (Baron-Cohen, 1990). More recently, the Autistic community have argued a move away from viewing social communication challenges experienced by Autistic individuals as being one-sided.

Executive Functioning (Pennington & Ozonoff, 1996)

Executive functioning refers to cognitive processes that include planning, organising, initiating, and monitoring tasks, working memory, self-regulation, and impulse control (Hill, 2004). The Executive Functioning Theory regarding autism (Pennington & Ozonoff, 1996) focuses on the challenges that Autistic individuals experience with executive functioning. This theory has been backed up by recent meta-analytic studies, which found a broad challenge of executive functioning skills among Autistic individuals (Demetriou et al., 2018; Lai et al., 2017).

Monotropism (Murray et al., 2005)

Monotropism (Murray et al., 2005) is another theory that extends on the central coherence hypothesis. Monotropism suggests that Autistic individuals have a difference in cognitive style and neurological processes in terms of processing sensory information and engaging attention toward and away from something (Murray, 2018; Murray et al., 2005). Monotropism can be used to explain Autistic people's intense interest as their attention can be drawn more strongly towards a smaller number of interests (Murray, 2018; Murray et al., 2005).

Double Empathy Problem (Milton, 2012)

Milton's (2012) Double Empathy Problem is a psychological and sociological concept that refers to a disconnect in mutual understanding between two people. The Double Empathy Problem suggests that individuals with similar experiences will better understand one another (Milton, 2012).

Context Blindness Theory (Vermeulen, 2015)

Context Blindness Theory (Vermeulen, 2015) highlights some aspects of the Central Coherence Theory. Context Blindness Theory considers challenges that Autistic individuals experience when “using context when constructing meaning rather than to their detail focused style of perception” (Vermeulen, 2015, p. 2).

The Autistic community favours Milton’s (2012) Double Empathy Problem and Murray’s (2005) Monotropism to describe the Autistic experience, as these theories align more closely with the NP (Aucademy, n.d). In contrast Theory, Theory of Mind is rejected by the Autistic community as it applies deficit-based thinking. Instead, a neurodiversity-affirmative view of this difference applies the Double Empathy Problem as it suggests that difficulties in social communication are not solely due to the Autistic individual (Milton, 2012). Instead, the communication gap that is experienced between Autistic and non-Autistic individuals is due to individuals having different experiences and levels of understanding of each other (Milton, 2012). Similarly, Monotropism also aligns with the NP, as it explains why Autistic individuals’ attention can be pulled towards interests that are most aroused rather than suggesting Autistic individuals experience executive dysfunction, which is deficit-focused (Murray, 2018). Conversely, theories like the ‘Refrigerator Mother’ theory, Central Coherence, and Context Blindness are based on the medical model of disability, and do not align with the NP.

2.3 Autism Assessment

There are two main pathways for CYP to access an autism assessment in Ireland through the Health Service Executive (HSE). A referral can be made to the child or young person's local disability or primary care service, depending on their level of need (HSE, 2023a). The second pathway involves applying for an Assessment of Need (AON; HSE, 2023a). An AON is a legal process within the Disability Act (2005) that aims to identify health needs. It also has statutory guidelines that assessments must be completed within six months of the referral. The HSE received 7,612 new AONs between June 2022-2023, an increase of 20% (HSE, 2023b).

2.3.1 Autism Assessment Guidelines

The National Institute of Health and Care Excellence (NICE) guidelines recommend that autism assessments should be carried out by a multi-disciplinary team (MDT) (NICE, 2011). Assessments should include detailed questions about the parent’s/carer’s or young

person's concerns, a developmental and medical history, and the child or young person's experiences of home and school life (NICE, 2011). The child or young person should also be assessed through observation and interactions to assess their social communication skills and behaviour, which can be supported using autism-specific tools (NICE, 2011).

Based on the NICE guidelines, the Psychological Society of Ireland (PSI) recently published 'Professional Practice Guidelines for the Assessment, Formulation, and Diagnosis of Autism in Children and Adolescents' (PSI, 2022). These guidelines are informed by the NP and the awareness of first-person narrative accounts of Autistic individuals (PSI, 2022). The PSI notes that due to the "emerging neurodiversity paradigm and the social model of disability, it is recognised that autism can result in fluctuating levels of disability depending on the demands of the neurotypical world and available environmental support" (PSI, 2022, p. 5). Therefore, the PSI's guidelines aim to support the evolving contextual changes (PSI, 2022).

Although the NP informs the PSI guidelines, no definition or explanation of the principles of the NP is outlined. However, the PSI define the NP in a written submission to the Oireachtas Joint Committee on Autism, which defines the NP as drawing from "the social model of disability and emphasises the role that systemic barriers play in the disablement of autistic and other neurodivergent people. This position shifts one's perspective from focusing on the individual to focusing on the barriers within their environment instead" (PSI, 2023, p. 2). The PSI's assessment guidelines have also been centred on the recommendations made in the 'National Access Policy for Children and Young People with Disability and Developmental Delay' (HSE, 2019), whereby it recommends that services should be individualised and a 'needs-led' approach should be used rather than a 'diagnosis led' approach (HSE, 2019). The PSI developed these guidelines based on previous guidelines, legal rights and value-based practice, the current Irish context, clinical expertise, and parents and the Autistic community's perspectives (PSI, 2022). It is recommended that psychologists refer to the DSM-5 (APA, 2013) or the ICD-11 (WHO, 2022) diagnostic criteria (PSI, 2022). The PSI recommends that psychologists should apply approaches in line with the NP and the social model of disability (PSI, 2022). However, this could be considered problematic as these recommendations do not align with the language diagnostic classifications or assessment tools psychologists use.

2.3.2 Assessment Tools

According to the PSI, psychologists should use multiple components during autism assessments, including direct observation and interviews of relevant individuals, to allow for the triangulation of information (PSI, 2022). Suggestions of standardised measures for autism assessments are outlined in the PSI guidelines (PSI, 2022). These include the Autism Diagnostic Interview-Revised (ADI-R: Lord et al., 1994), the Autism Diagnostic Observation Schedule, Second Edition (ADOS-2: Lord et al., 2012), and the Diagnostic Interview for Social and Communication Disorders (DISCO: Wing et al., 2002). The ADI-R is a parent/carer interview that provides a diagnostic algorithm that assesses the child's reciprocal social interaction, communication and language, and restricted, repetitive, stereotyped interests and behaviours (Lord et al., 1994). Similarly, the DISCO is another type of semi-structured interview conducted with the parent/carer to explore the level of development, disability, and specific needs (Carrington et al., 2019). The ADOS-2 is a semi-structured observational assessment that assesses communication, social interaction, play, stereotyped behaviour and restricted interests (Lord et al., 2012). The PSI also states that screening tools can be used when required to add useful information to the assessment, such as guiding further assessment. Still, it should not be the only measure to diagnose autism (PSI, 2022). It is important to note that assessment tools, such as the ADOS-2 and ADI-R, use deficit-focused language aligned with the diagnostic criteria to characterise autism (Rutherford & Johnston, 2022). No current standardised assessment tools use a neurodiversity-affirmative approach (Rutherford & Johnston, 2022). This suggests that updated neurodiversity-affirmative language may be required during autism assessments.

In terms of behavioural assessment approaches, the Department of Education (DoE) guidelines for supporting Autistic CYP in schools recommend the use of Functional Behavioural Assessments (FBAs) to assess the function of a behaviour that is causing difficulty. However, it is debated that behaviourist thinkers use a one-dimensional view of behaviours and only base their assessment on observations rather than exploring an individual's cognitive processes, moods, and feelings (Bower, 2008; Moore, 2013).

2.3.3 Parent Experiences of Autism Assessment

Parental knowledge and emotional reactions predict how parents manage an autism diagnosis (Anderberg & South, 2021). For example, parents who have a good understanding of autism and know the likelihood of an autism diagnosis for their child experience more positive emotions and feel more prepared to support their child (Anderberg & South, 2021).

Mothers of Autistic children who viewed autism as a neurodivergence, were found to have lower levels of psychological distress (Ferenc et al., 2023). However, after controlling for caregiver burden, it was found that mothers' attitudes toward autism did not influence their levels of distress (Ferenc et al., 2023). Therefore, professional demeanour and information disclosure are essential factors in parents' experiences of learning about an autism diagnosis (Anderberg & South, 2021). For anxious parents, professionals also require a balance of when to provide emotional support and information to parents for them to feel prepared and ready to support their child (Anderberg & South, 2021).

A recent scoping review examined parent experiences of autism diagnosis and identified four key themes: i) journey to assessment, ii) assessment process, iii) delivery of diagnosis feedback, and iv) post-diagnosis provision of information and support (Makino et al., 2021). In this review, parents identified that the delays awaiting an autism assessment were a barrier (Makino et al., 2021). Additionally, professional attitudes and knowledge were also reported to be a barrier for parents, which suggests that professionals should not dismiss parental concerns (Makino et al., 2021). There was also some variation in how post-assessment feedback was reported by parents, although clarity was extremely important (Makino et al., 2021). Finally, parents also identified that there were significant difficulties after an autism diagnosis in trying to understand the healthcare system to get the necessary support (Makino et al., 2021).

2.4 Autism Intervention

Alongside the shifts in the diagnostic criteria of autism, there has been a shift in approaches to autism intervention over the past few decades. When supporting Autistic CYP, there are several areas where interventions can be applied. These include behavioural supports, visual and environmental supports, socio-communication supports, and therapeutic supports. Some of these approaches have been criticised for incorporating the deficit-based approach, which does not align with the NP. A review of the effectiveness of early interventions for autism suggested more rigorous research needs to be conducted as the research published includes small effect sizes and has a high risk of bias (French & Kennedy, 2018). It has been recommended that autism interventions be evidenced-based, use a strengths-based approach, and work with Autistic children's 'developmental trajectory' (Leadbitter et al., 2021). Additionally, interventions focusing on reducing Autistic behaviour

should be used cautiously and not leave the child without an alternative coping mechanism (Leadbitter et al., 2021).

2.4.1 Intervention Guidelines

The NICE guidelines for supporting Autistic CYP recommend the adjustment to social and physical environments, which may include visual support or considering the child's or young person's sensory sensitivities (NICE, 2013). NICE guidelines also recommend using psychosocial interventions, including play-based strategies, to support joint attention, engagement, and reciprocal communication (NICE, 2013). These psychosocial interventions should be adjusted to the developmental level of Autistic children or young people's developmental level and aim to increase parents' and teachers' understanding of the child's or young person's needs (NICE, 2013). Recommendations on how to anticipate and prevent behaviours that challenge are also included in these guidelines (NICE, 2013).

NICE has also published guidelines on how to support Autistic young people who experience co-existing anxiety by adapting cognitive behavioural therapy (CBT) approaches (NICE, 2013). Firstly, professionals should consider whether an individual or group delivery is more appropriate, as some Autistic CYP may find group spaces difficult. Therefore, individual CBT is more appropriate (NICE, 2013). Additionally, the method of the delivery of CBT is recommended to be adapted to support Autistic CYP engaging in CBT. These recommendations include incorporating emotion recognition, written and visual information and structured worksheets, offering regular breaks to maintain attention, incorporating the Autistic child's or young person's interests into the therapy sessions where possible, and involving parents in the therapy sessions (NICE, 2013).

The British Psychological Society (BPS) has also published best practice guidelines on 'Working with Autism, Best Practice Guidelines for Psychologists' based on the NICE guidelines (BPS, 2021). These include ten practice principles to help guide interventions for Autistic people. These include i) early recognition of needs, ii) the perspectives of the Autistic person should be identified, iii) interventions should be provided in a natural and normal context, iv) interventions should be strengths-based, v) interventions should be based on a 'functional analysis' of behaviour which is 'autism aware', vi) interventions should begin exploring the psychosocial factors rather than relying on pharmaceutical interventions, vii) psychologists should make the social, physical, and sensory environment comfortable to individuals, viii) clinicians should respect the individuals' goals, ix) professionals should

work within a multidisciplinary team, and x) psychologists should decide to use an evidence-based intervention best suited to meet the child's needs (BPS, 2021).

The DoE recently published its ‘Autism Good Practice Guidance for Schools – Supporting Children and Young People’ to support the well-being, learning and participation of Autistic CYP within mainstream, special classes, and special schools, by understanding their strengths and needs (DoE, 2022a, 2022b). These guidelines were developed in consultation with the National Educational Psychological Service (NEPS), the Department Inspectorate, the NCSE, the Middletown Centre for Autism, and the Department’s Special Education section (DoE, 2022b). The guidelines are recommended as a resource for schools and provide guidance and support across eight different domains, which include i) learning environment, ii) language and communication development, iii) social development, iv) emotional development, v) sensory processing, vi) functional skills for daily living, vii) academic development, and viii) behavioural development (DoE, 2022a). The guidelines include international research and practice and report on how the NP views autism (DoE, 2022a, 2022b). However, the behavioural approaches recommended are based on Applied Behavioural Analysis (ABA), Positive Behaviour Support (PBS) and social skills teaching. These approaches have been criticised by the Autistic community as they try to normalise Autistic CYP’s way of being (AsIAM, 2022b; Rutherford & Johnston, 2022).

2.5 Paradigm Shift

In recent years, there has been a significant paradigm shift in the way society views autism. This shift moves away from looking at autism as a ‘disorder’ through the medical lens, towards exploring the environmental barriers that add challenges for Autistic people to a view where autism is seen as a neurological difference.

2.5.1 *The Medical Paradigm*

The medical paradigm, also known as the ‘medical model of disability,’ focuses on ‘within-person’ factors contributing to one’s disability or disorder (Rutherford & Johnston, 2022). Disability under this paradigm is defined as “any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being” (WHO, 1980, p. 143). This model focuses on autism as a disability and focuses on functional deficits, whilst ignoring Autistic individuals’ strengths (Pellicano & den Houting, 2022). The medical model views autism through scientific research, focused on the genetic, cognitive, and neurodevelopmental foundations (Anderson-

Chavarria, 2022). Moreover, the medical paradigm has been argued to be individualistic, as it views autism, and disability in general, as a direct cause of an individual's biology and disregards contextual factors (Pellicano & den Houting, 2022). For instance, the medical paradigm does not include perspectives of the Autistic community or social/environmental factors contributing to an Autistic individual's difficulty (Pellicano & den Houting, 2022). Additionally, autism is perceived as a deficit and something that needs to be treated and cured (Pellicano & den Houting, 2022). However, no recognised aetiology suggests a common cause (Baron-Cohen, 2017). Neurotypical individuals have primarily carried out autism research and intervention within this model and have concentrated on developing Autistic individuals' skills to fit into a neurotypical world (Pellicano & den Houting, 2022; Rutherford & Johnston, 2022).

2.5.2 The Social Model of Disability

Unlike the medical model, which is deficit-focused, the social model of disability views autism as a social construction that is caused by societal barriers (Anastasiou & Kauffman, 2013). The social model of disability considers barriers in the environment which cause impairments to individuals with disabilities (Oliver, 1990), which is considered the polar opposite of the medical model (Dwyer, 2022). The social model of disability argues that disability is caused solely by societal and environmental barriers (Dwyer, 2022). However, the disregard for biology and disability are considered limitations of this model, as an Autistic person may still experience difficulties despite being given suitable accommodations (Dwyer, 2022). For example, an Autistic individual with executive functioning difficulties, which are the result of differences in brain functioning, still may experience organisation and time management difficulties despite having access to accommodations such as time management apps (Dwyer, 2022). Some opinions of the social model for autism suggest that a diagnosis is unnecessary if an individual's needs have been supported (Rutherford & Johnston, 2022). However, this view has been criticised by some of the Autistic community, as a diagnosis can be a therapeutic and transformative process for an Autistic individual (Rutherford & Johnston, 2022). Additionally, according to the DSM-5 (APA, 2013) and the ICD-11 (WHO, 2022), for an individual to receive an autism diagnosis, they must experience significant impairment in functioning due to the symptoms of autism.

2.5.3 *Neurodiversity and the Neurodiversity Paradigm*

The definition of neurodiversity is challenging, as there is no concise definition (Dwyer, 2022; Hughes, 2020). This has caused the term to mean different things to different people (Chapman, 2020). The coinage of the term neurodiversity has been associated with Judy Singer in 1998. At the time, Singer defined neurodiversity as a political term to support the Autistic self-advocacy movement (Singer, 1998; Singer, n.d.). Singer first referred to “a politics of Neurological Diversity, or ‘Neurodiversity’” (Singer, 1998, p. 64) and suggested that ‘Neurologically Different’ represented “a new addition to the familiar political categories of class/ gender/race” (Singer, 1998, p. 64) which would “augment the insights of the social model of disability” (Singer, 1998, p. 64). Although Singer is considered to have coined ‘neurodiversity,’ the term first appeared in Harvey Blume’s article, which explored cognitive variability and shifted the view away from perceiving such things as ‘normal; and ‘abnormal’ cognition (Blume, 1998). The purpose of Singer’s definition was to suggest an umbrella term in support of neurological minorities and to add neurodiversity to intersectionality categories, as the term disability was considered a physical, mental illness, and intellectual disability at the time (Singer, 1998; Singer, n.d.). Singer’s first definition of neurodiversity is considered quite vague, which leads to others interpreting the term in their own way (Dwyer, 2022). More recently, Singer defined neurodiversity as “a biological truism that refers to the limitless variability of human nervous systems on the planet, in which no two can ever be exactly alike due to the influence of environmental factors” (Singer, n.d.). Singer views neurodiversity as a “subset of biodiversity”, suggesting limitless neuro-cognitive variability within humans (Singer, n.d.). Both Singer’s (1998; n.d.) and Blume’s (1998) definitions of neurodiversity are considered political terms where they advocate for the inclusion of neurodivergent individuals in society (Chapman, 2020; Singer, 1998; Singer, n.d.). A recent publication by a group of Autistic scholars of autism and neurodiversity has highlighted that Judy Singer did not solely coin or develop the theory or concept of neurodiversity. Instead, neurodiversity and its associated concepts were collectively formulated by autistic advocates rather than a single author (Botha et al., 2024). Walker’s definitions offer distinctions between the term neurodiversity and the NP. Walker claims that neurodiversity is the “diversity of human minds, the infinite variation in neurocognitive functioning within our species” (Walker, 2021, p. 31). Walker (2021) views the NP as one that depathologises neurocognitive functioning that is neurodivergent in nature, in contrast to viewing the NP as a political term (see Blume, 1998; Singer, 1998). Walker described the NP as “a specific perspective on neurodiversity—a perspective or approach that boils down to these fundamental principles: i)

neurodiversity is a natural and valuable form of human diversity, ii) the idea that there is one ‘normal’ or ‘healthy’ type of brain or mind, or one ‘right’ style of neurocognitive functioning, is a culturally constructed fiction, no more valid (and no more conducive to a healthy society or to the overall well-being of humanity) than the idea that there is one ‘normal’ or ‘right’ ethnicity, gender, or culture, and iii) the social dynamics that manifest in regard to neurodiversity are similar to the social dynamics that manifest in regard to other forms of human diversity (e.g., diversity of ethnicity, gender, or culture). These dynamics include the dynamics of social power” (Walker, 2021, pp. 31-32).

The NP and the social model of disability strongly oppose the medical model, which pathologises neurological differences (Dwyer, 2022). However, the NP was not intended to disregard biological factors, like the social model of disability (Singer, 2016). In fact, Singer suggests that the NP is a middle-ground which falls between the medical model and social models of disability, as there is a “need to transcend the construction of binary oppositions such as Medical Model vs. Social Model” (Singer, 2016, p. 28). Chapman (2020) argues that the NP opposes the medical model. Chapman (2020) also claims that there is some conflict between the NP and the traditional social model of disability, especially concerning the concept of impairment, as the social model argues that impairment is measured based on what is considered normal level functional ability. However, neurodiversity challenges this by suggesting that diversity itself is normal, not just adhering to a standard species norm (Chapman, 2020). Therefore, Chapman (2020) suggests the need to appreciate differences in how individuals function without relying on the idea of a 'normal' standard for impairment. Chapman (2020) also describes the NP as an “epistemically useful concept”, emphasising its role in reshaping knowledge and how we view and accept neurodivergence and creating mutual understanding (Chapman, 2020, p. 219). An overview of the disability models and the NP is outlined in Table 2.4.

Both Singer's (n.d.) and Chapman's (2020) definitions of neurodiversity view it as an evolving term (Dwyer, 2022). For example, Chapman (2020) describes the NP as a 'moving target', where it responds to society and culture and how neurodivergent and neurotypical individuals interact, and it will mean “different things at different times” (Chapman, 2020, p. 219). Therefore, the concept of neurodiversity is likely to continue to evolve, with new interpretations and refinements emerging as societal perspectives shift (Chapman, 2020). This highlights the importance of ongoing research and dialogue in this field. Additionally, due to the concept being developed by social constructions, in the future, it may be possible that the neurodiversity concept will no longer be needed due to increases in interdependence and

social environments for neurodivergent individuals (Stenning & Rosqvist, 2021). Chapman (2020) also argues that there is a need to differentiate between neurodivergence and pathology, but this leads to a risk of definitions becoming harmful and excluding individuals.

Table 2.4

Overview of Disability Models and the Neurodiversity Paradigm

| Model/ Paradigm | Medical Model of Disability | Neurodiversity Paradigm | Social Model of Disability |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Key Focus | Individual Deficit | Natural Variation and Strengths | Societal Barriers |
| Perspective on Disability | Disability is viewed as a personal impairment or medical condition that should be treated or normalised to fit in with able-bodied or neurotypical individuals. | Celebrates neurological diversity as a natural and valuable aspect of humanity and focuses on an individual's strengths and needs. | Emphasises that disability arises from social/environmental barriers, and accommodations should be put in place to reduce these barriers. |
| Approach to Autism | Autism is seen as a collection of deficits and abnormalities that should be targeted to normalise and reduce Autistic ways of being. | Autism is a unique cognitive style with inherent strengths and needs. | Autism-related challenges result from societal barriers, which should be accommodated. |
| Aligned Theories | 'Refrigerator Mother' theory (Bettelheim, 1967); Central Coherence (Frith, 1989); Theory of Mind (Baron-Cohen, 1990), Executive Functioning (Pennington & Ozonoff, 1996); Context Blindness Theory (Vermeulen, 2015). | Double Empathy Problem (Milton, 2012); Monotropism (Murray et al., 2005). | |

Dwyer (2022) also proposed an interactionist/ecological definition of neurodiversity approaches, which considers individuals' interactions with their own characteristics and the environment. Claims by this approach are stated below.

- “Disability is the product of an interaction between the characteristics of a disabled person and the environment around them.
- Disability can be addressed by reshaping environments and society (e.g., by working to reduce stigma) or by changing an individual (e.g., by teaching them adaptive skills).

- Curing or normalizing the disabled person should not be goals.
- Diversity of minds and brains should be valued and individuals with neurological disabilities should be accepted for who they are” (Dwyer, 2022, p. 77).

By applying Dwyer’s (2022) interactionist/ecological neurodiversity approach, interventions can aim to support building individual skills and also put in place environmental support for Autistic individuals.

2.5.4 Neurodiversity Movement

The Neurodiversity Movement (NM) is a political/social activist movement that advocates for civil rights, equality, respect, and social inclusion of neurodivergent individuals (Walker, 2021). The NM originated from the Autism Rights Movement, which began in response to the establishment of the National Autistic Society (NAS) in 1962 (Fletcher-Watson & Happé, 2019; Walker, 2021). The NM distinguishes itself by including all neurominorities, not just Autistic individuals (Fletcher-Watson & Happé, 2019; Walker, 2021). The NAS, the world's first autism association, empowered parents of Autistic children, allowing them to play a significant role in advocacy for their children (Fletcher-Watson & Happé, 2019). However, some parents had differing beliefs about how their children should be supported. For example, some parents believed in curing autism, while others wished to focus on the acceptance and rights of their children in society (Fletcher-Watson & Happé, 2019). Subsequent to this, the lived experience of Autistic individuals came to the forefront (Fletcher-Watson & Happé, 2019). For example, Sinclair’s (1993) influential essay, ‘Don’t Mourn for Us,’ focused on parental acceptance of their Autistic child, hugely influencing the NM. Sinclair stated that “autism is a way of being. It is pervasive; it colors every experience, every sensation, perception, thought, emotion, and encounter, every aspect of existence. It is not possible to separate the autism from the person--and if it were possible, the person you'd have left would not be the same person you started with” (Sinclair, 1993).

The NM includes many individuals and organisations that have different understandings of the NP, political positions, and goals of the movement (Walker, 2021). The NM advocates for the use of a more ethical and acceptable language of difference/disability and a framework that is strengths-based and does not pathologise difficulties (Baron-Cohen, 2017).

Although advocates have embraced the NM, some critics argue that this advocacy overlooks Autistic individuals with significant support needs and intellectual disabilities

(Hughes, 2020). Despite the proposals that the NP empowers Autistic individuals, which Autistic advocates have embraced, the NM has been criticised for 'white-washing' autism (Costandi, 2019; Hughes, 2020; Lutz, 2015). This criticism asserts that the movement does not adequately represent those with severe levels of autism, who experience significant impairments and challenges (Costandi, 2019; Hughes, 2020; Lutz, 2015). Concerns have also been raised by parents of Autistic children with significant support needs, who feel that the movement does not resonate with their experiences (Costandi, 2019). This is an important view to consider as, according to the CDC, 35.2% of Autistic individuals also have been diagnosed with an intellectual disability (CDC, 2022). This is a considerable proportion of individuals who may not be or feel they are not represented by the NM. Additionally, the NP has been criticised because of claims that it does not consider autism as a disability, which therefore leads to claims that Autistic individuals do not require support (Dwyer, 2022). However, this is not the position of Autistic advocates (den Houting, 2019), or the diagnostic criteria where symptoms must cause a significant impact on functioning (APA, 2013; WHO, 2022).

2.5.5 *Neurodivergent vs Neurotypical*

Another aspect of neurodiversity is that people fall within two categories, neurotypical or neurodiverse, where one has a variation in brain functioning (Jaarsma & Welin, 2012). Neurodivergence or being Neurodivergent means “having a mind that functions in ways which diverge significantly from the dominant societal standards of normal” (Walker, 2021, p. 33). Neurodivergence is usually innate and genetic, such as autism and dyslexia. However, it can also be due to different experiences which cause the brain to alter, such as trauma or drug use (Walker, 2021). Other forms of neurodivergence, such as epilepsy or brain injuries, can be cured without removing the fundamental way of being for these individuals (Walker, 2021). Neurotypical individuals are those whose neurology falls within societal norms and conforms to cultural views of what is considered a typical mind without suggesting a specific normal brain (Walker, 2021).

2.5.6 *Neurodiversity-Affirmative Approaches*

Considering the Autistic community’s language preferences, using strengths and needs-based practices, and considering the inclusive engagement of Autistic individuals are all essential approaches that align with the NP.

2.5.6.1 Language Preferences. Language is fundamental to the NP as “what people say or write produces specific versions of the world, oneself, and others, and language conveys, shapes, and perpetuates ideologies. Language choices are also reflective of power structures and mirror dominant narratives and ideologies about social phenomena” (Bottema-Beutel et al., 2021, p. 20). There has been debate about whether person-first or identity-first language is more acceptable to describe autism over the past 20 years (Keating et al., 2023). For example, there has been a shift from a person-first (i.e., ‘person with autism’) to an identity-first approach (i.e., ‘Autistic person’) (Bury et al., 2020). Autistic activism has played a key role in language preferences by allowing Autistic individuals to advocate what type of language belongs to them whilst also being part of the Autistic community (Keating et al., 2023). Some Autistic individuals viewed autism as part of their identity, whilst others preferred not to have autism viewed as their entire identity (Keating et al., 2023). The NICE (2013) and PSI (2022) guidelines suggest that identity-first language of ‘Autistic child and young people’ be adopted and the terminology of ‘symptoms’ should be changed to ‘features.’

In a study investigating the language preferences of 198 Autistic Australian adults, the terms ‘Autistic’, ‘Person on the Spectrum’, and ‘Autistic Person’ were ranked the most preferred and least offensive (Bury et al., 2020). Findings also suggested that Autistic people did not like language that includes ‘disorder’ or ‘condition’ (Bury et al., 2020). This may be because this type of deficit-focused language reflects the medical model of disability, and the NM argues that this should not be used because it is subjective and not based on scientific research (Dwyer, 2022). Additionally, those who preferred person-first language perceived identity-first language negatively and vice versa (Bury et al., 2020).

Another study of autism-related research on English speakers globally found that there is no universal consensus about what language to use when describing autism (Keating et al., 2023). This study found a variation of language preferences between countries and found that almost 80% of individuals preferred identity-first (i.e. “Autistic person”) language, whilst around 24% of individuals preferred person-first (i.e. “person with autism”) language (Keating et al., 2023). Language preferences were justified by difficulties distinguishing between the words Asperger's and autism, as well as functional labels (such as "high functioning" and "low functioning"), which can be misleading and damaging (Keating et al., 2023). Given the variability in Autistic individuals' functioning across different contexts and the quality of support, coupled with the lack of correlation between adaptive functioning

measures and intellectual ability, concerns arise regarding the accuracy of labelling functional levels due to autism not being dichotomous or linear (Alvares et al., 2020; Fennell & Johnson, 2022; Gardiner, 2018). It is recommended to describe the level of ability using overall intellectual ability descriptors such as intellectual disability (Bottema-Beutel et al., 2021). Additionally, deficit-based language positions Autistic individuals as a burden, which can be caused by environmental factors, rather than viewing autism as differences in brain wiring (Keating et al., 2023).

In terms of professional language preferences, almost half of professionals were found to prefer using “person with autism” (Kenny et al., 2016). Furthermore, Botha et al. (2021) have suggested that ‘person on the autism spectrum’ is a reasonable middle ground between person-first and identity-first language. Professionals should be aware that “honoring the preference of the group is not only a sign of professional awareness and respect for any disability group but also a way to offer solidarity” (American Psychological Association [APA], 2019). Others argue that as autism describes a broad range of abilities and challenges, a broad range of terms are also required, and the proposed limitations of terms by a number of Autistic communities may have harmful consequences for researchers and clinicians, as well as those with a diagnosis of autism (Lombardo & Mandelli, 2022; Singer et al., 2023). It is argued that the censorship of terms such as “disorder,” “deficit,” or “challenging behaviour” is harmful (Singer et al., 2023). Ignoring these terms and using the term ‘difference’ is argued to not accurately describe Autistic individuals with life-limiting needs (Singer et al., 2023). Singer et al. (2023) argue that researchers and practitioners should be able to use the terms most accurately to describe autism without fear of retribution. Overall, the language used to describe autism must be accurate and concise while respecting individuals’ personal preferences by asking what they prefer (Amaral, 2023; Keating et al., 2023; Kenny et al., 2016).

2.5.6.2 Strengths and Needs-Based Support Approach. Autistic individuals have many strengths. For example, Autistic adults reported that hyperfocus, attention to detail, memory, and creativity were strengths they attributed to autism (Russell et al., 2019). Although the diagnostic criteria for autism are still used during assessments, professionals are shifting to a more strengths-based approach when describing autism orally and in writing (Rutherford & Johnston, 2022). Strength-informed assessments should also be considered with Autistic CYP, as cognitive assessments can underestimate their cognitive potential (Courchesne et al., 2015). Strengths-based assessments can enhance parents' self-esteem,

foster positive perceptions of their parenting, alleviate feelings of failure and blame, bolster trust with professionals, and promote positive emotions and a more optimistic outlook on autism (Anderberg & South, 2021; Crane et al., 2018; Urbanowicz et al., 2019).

Neurodiversity-affirmative approaches also support Autistic individuals' challenges that they experience rather than aiming to treat or change their neurotype (Hartman et al., 2023). Environmental changes should be considered when supporting Autistic individuals (Hartman et al., 2023). Parents of Autistic CYP can play an essential role in identifying their children's strengths. For example, Warren et al. (2021) found that parents of Autistic adolescents could provide helpful information to inform the development of strength-based interventions for the transition to adulthood. Additionally, a recent scoping review conducted by Najeeb and Quadt (2024) aimed to examine the biopsychosocial factors that impact Autistic children, young people, and adults' wellbeing. The review demonstrated that most studies published examined psychological factors, which included an Autistic individual's autonomy, identity, and the impact of their diagnosis (Najeeb & Quadt, 2024). Social support and connectedness were also found to be important areas that impact Autistic individual's wellbeing (Najeeb & Quadt, 2024). From the papers included in this review, it was noted that most of them focused on Autistic adults rather than Autistic CYP (Najeeb & Quadt, 2024). Therefore, further research is needed to comprehensively evaluate the effectiveness of strengths-based and neurodiversity-affirmative approaches, especially in the context of Autistic CYP.

2.5.6.3 Involving Autistic Individuals. Due to the lived experience of having autism, Autistic individuals are considered experts in terms of their knowledge about autism (Gillespie-Lynch et al., 2017). Autistic individuals have more knowledge and less stigma towards autism than non-autistic individuals, and their views tend to align with the NP rather than a deficit-based model (Gillespie-Lynch et al., 2017). Additionally, Autistic culture and identity should be respected, and diversity should be valued (Hartman et al., 2023). An increasing number of studies now involve Autistic individuals, which has supported research to refocus the aims (Leadbitter et al., 2021). Therefore, there is a shift to include neurodivergent individuals as key stakeholders in research and service provision to identify their priorities, preferences, and lived experiences (Roche et al., 2021; Rutherford & Johnston, 2022). Most early intervention research on autism considers parental views and perspectives (Leadbitter et al., 2021). However, although parents have good intentions and

hope for their children, it is argued that neurotypical parents may not fully understand their child's needs from an Autistic or neurodiverse perspective (Leadbitter et al., 2021).

As the NP views autism as a natural human variation, Autistic self-advocates argue that behavioural interventions that focus on normalising neurodivergent individuals do not align with the NP. From the 1960s, autism was majorly viewed as a behavioural disorder. In 1987, Ivar Løvaas established ABA to reduce challenging behaviour and improve communication for Autistic children, which included punitive components (Larsson & Wright, 2011; Suppo, 2017). ABA focuses on the manipulation of antecedents and consequences in order to obtain the target behaviour, which can be observed to evaluate the outcome of the intervention (Vivanti & Messinger, 2021). From the 1980s to the 1990s, there was a shift in approaches to Positive Behaviour Support (PBS) (Suppo, 2017).

PBS is a multi-component intervention framework which is used to understand and address and support children who present with behaviours that challenge, particularly those with developmental disabilities (Legg & Thomson, 2017). It combines ABA with evidence-based interventions to create supportive environments that promote skill development and improve quality of life, while minimising restrictive practices (Legg & Thomson, 2017).

It is argued that behaviourist thinkers take a one-dimensional view of the functions of behaviours, and do not consider cognitive processes, moods, and feelings of individuals (Bower, 2008; Moore, 2013).

Self-advocates debate that the initial ideas of Løvaas, the founder of ABA, suggesting that Autistic individuals are 'not people in a psychological sense,' were founded on a harmful idea to Autistic people (Løvaas, 1974). The Irish autism charity AsIAM has recently released a statement opposing the practice of ABA. In this statement, the charity stated that the practice of ABA views "autism as a deficit" and makes Autistic individuals "conform to neurotypical norms" (AsIAM, 2022b). In a phenomenological qualitative study of Autistic adults' experiences of ABA, Autistic individuals reported that they think interventions should not focus on attempting to make them seem more neurotypical and believe ABA is an unethical practice (Anderson, 2022). Additionally, social skills training that aims to normalise Autistic individuals' socio-communication in order to be more neurotypical has also been criticised (Rutherford & Johnston, 2022). Masking and camouflaging are where Autistic characteristics of individuals are reduced to seem more neurotypical. However, masking has

been shown to cause exhaustion and pressure on Autistic individuals' self-perception (Hull et al., 2017).

Therefore, professionals should listen to Autistic individuals when making decisions (Anderson, 2022), as Autistic individuals wish to have interventions that consider their consent and autonomy (Autistic Self Advocacy Network, 2017). In addition, autism research should also consider Autistic voices. This issue was raised after the launch of the Spectrum 10k study 2021, which aimed to examine the genetic and environmental factors related to autism and other physical and mental health conditions. This study was paused due to advocacy from the Autistic community, over fears that it aimed to cure autism and have the potential to misuse genetic data (National Autistic Society, 2021; Voyles Askham & Dattaro, 2021).

2.5.6.4 Further shifts in Neurodiversity-Affirmative Approaches. Due to the evolution of the conceptualisation of autism, the PSI provided a written submission to the Oireachtas Joint Committee on Autism (PSI, 2023). This submission included key issues and recommendations regarding assessment, intervention, AON, and education regarding special classes and inclusion (PSI, 2023). The PSI stated that the language of the AON is outdated and not respectful to Autistic individuals. Additionally, as the AON is based on a medical model of disability, it does not recognise that an Autistic individual's needs may fluctuate depending on diverse types of demands. Therefore, the PSI has recommended that the AON should be reviewed and amended to align with the social model and the NP. In terms of education, the PSI recommends a change of language that is stigmatising, such as "unit" and "ASD class." Furthermore, a recommendation to promote neurodiversity-affirmative approaches to teaching practices was also recommended (PSI, 2023). The PSI also recommends that there should be Autistic led training in all services to educate, inform, and challenge ableist attitudes and create a culture of acceptance (PSI, 2023).

Additionally, the DSM-5's and ICD-11's diagnostic criteria for autism have been based on a medical model and reductionist view of the human condition (Van Dyke & Hovis, 2014). This does not align with the views of the neurodivergent community, as they use deficit-based language, which implies that neurotypical individuals' characteristics are superior (Hartman et al., 2023). Reframing the existing classification systems to align with the NP will allow Autistic individuals' strengths, preferences, and challenges to be explored (Hartman et al., 2023).

The evolving landscape of the application of principles of the NP concerning autism has contributed to a paradigm shift in how autism is viewed and supported. Because of this and continued advocacy from the Autistic community, the NM, and professional guidelines that recommend that the NP should inform professional practices (e.g., PSI, 2020), there is a need to consider these contextual changes. These perspectives inform the upcoming scoping review, which explores the landscape of neurodiversity-affirming practices in professional psychological interventions for Autistic CYP. However, given that the neurodiversity-affirmative approaches are still in the early stages, it is important to approach these shifts with caution and recognise the tentative nature of this evolving field. No previous reviews have been completed on exploring neurodiversity-affirmative practices, and there is a scarcity of empirical evidence investigating the effectiveness of outcomes of neurodiversity-affirmative approaches when supporting Autistic CYP. Given the increasing popularity of the NP and its influence on professional guidelines, it is imperative that the literature is reviewed to explore what neurodiversity-affirming practices psychologists apply in practice to support Autistic CYP.

2.6 Review Question

‘What neurodiversity-affirming professional psychological practices can support Autistic CYP?’

2.7 Scoping Review with Thematic Synthesis

A scoping review, also known as a scoping study, is a type of knowledge synthesis that addresses an exploratory research question (RQ) by methodically searching, selecting, and synthesising existing knowledge (Colquhoun et al., 2014). Its goal is to map key concepts, types of evidence, and research gaps related to a specific area or field (Colquhoun et al., 2014). A scoping review was conducted to identify the types of evidence available and the characteristics of neurodiversity-affirmative practices in the literature (Munn et al., 2018). Scoping reviews are valuable when there have been no previous reviews on a topic and when the literature has a “complex or heterogeneous nature not amenable to a more precise systematic review of the evidence” (Peters et al., 2015, p. 141).

2.7.1 Methodological Framework

This review used Arksey and O’Malley’s (2005) methodological framework for scoping reviews, which has been further updated by the Joanna Briggs Institute (JBI; Peters et al., 2020). This protocol recommends five non-optional stages. They include (i) identifying

the RQ, (ii) identifying relevant studies, (iii) study selection, (iv) charting the data, and (v) collating, summarising, and reporting results. Optional stage 6, which recommends consultation with stakeholders, was not conducted as part of this review.

2.7.1.1 Stage 1: Identifying the Review Question. The Population Concept Context (PCC) framework was applied in order to create the review question (Peters et al., 2020). The PCC acronym is recommended for scoping reviews as it supports the researcher in creating inclusion and exclusion criteria and developing the review question (Peters et al., 2020). For this review, the population was Autistic CYP. The concept was neurodiversity-affirmative practice, and the context was professional psychological practice. One key question was identified by incorporating the PCC framework into the review question, which resulted in ‘what neurodiversity-affirming professional psychological practices can support Autistic CYP?’

2.7.1.2 Stage 2: Identifying relevant studies. Preliminary scoping searches were conducted on neurodiversity-affirmative practices on two databases (APA PsychArticles, APA PsychInfo). Keywords of relevant texts were identified and then incorporated in the final search strategy found in Table 2.5. A literature search was then conducted between the 4th and 12th of March, 2023. Databases used to perform the literature search included APA PsychArticles, APA PsychInfo, CINAHL Complete, MEDLINE, ERIC, Academic Search Complete, British Education Index, Education Source, Business Source, and PubMed. Reference list searches of the selected studies were screened to ensure potential articles were identified. A second literature search was completed on the 29th of January 2024, filtering for papers published between 2023 and 2024 to ensure the review included up-to-date literature.

Table 2.5

Search Terms

| Component 1 | Component 2 | Component 3 | Databases |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Neurodiver* OR Neurodiver*- affirming OR Neurodiver* concept | AND Autism Spectrum Disorder OR ASD OR Autism OR Autistic | AND Assessment OR Diagnosis OR Intervention OR Therapy OR Treatment OR Practice OR Guidelines OR Protocols Language OR Terminology OR Identity-first OR | APA PsychArticles, APA PsychInfo, CINAHL Complete, MEDLINE, ERIC, Academic Search Complete, |

| | |
|----------------------|-----------|
| Diagnostic labels OR | British |
| Attitudes OR | Education |
| Perspectives OR | Index, |
| Knowledge OR | Education |
| Stigma OR Identity | Source, |
| OR Acceptance OR | Business |
| Strategies | Source, |
| | PubMed |

2.7.1.3 Stage 3: Study selection. Records were systematically selected using the inclusion and exclusion criteria in Table 2.6. Endnote software was used to manage data extraction. Once the duplicates were removed, title and abstract screening were conducted to identify relevant records. Although scoping reviews can include grey and unpublished literature (Peters et al., 2020), the researcher decided only to include peer-reviewed literature to ensure high-quality evidence.

2.7.1.3.1 Search Results. A PRISMA flow diagram (Figure 2.1 & Figure 2.2) demonstrates the selection procedure used for this review. The first electronic searchers identified 3917 citations (Figure 2.1), which resulted in 1628 unique citations screened after removing duplicates. Titles and abstracts of these citations were screened based on the inclusion criteria, resulting in 36 articles being retained for a full-text review. The list of excluded studies after full-text screening is included in Appendix A. Ten of these studies then met the criteria for the scoping review. Backwards citation chaining was completed for the reference lists of the 10 accepted citations, which resulted in adding one paper. From this selection process, 11 studies were selected to be included in this review. During the second search (Figure 2.2), literature from 2023 and 2024 was searched only to ensure all up-to-date articles were included in the review. 68 citations were identified, of which 38 were duplicates. After titles and abstracts were screened, 10 citations were included in a full-text review. Four of these studies met the inclusion criteria. From the two literature searches, 15 studies were included in this review (Table 2.7). As some papers in the review aimed to examine psychology practices that support Autistic CYP (e.g., assessment, intervention, behavioural, and therapeutic support), it did not only include articles which stated ‘psychologists.’ For instance, some articles referred to ‘diagnosticians,’ ‘clinicians,’ and ‘professionals.’ Therefore, the review findings will use the word ‘professionals’ to ensure the findings of the review do not assume suggestions only apply to psychologists.

Table 2.6
Inclusion and Exclusion Criteria and Rationale

| Review Category | Inclusion criteria | Exclusion criteria | Rationale |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Population | Refers to Autistic children or young people (i.e., autism, Autism Spectrum Disorder, ASD, Autistic Spectrum). | Neurotypical individuals & does not refer to Autistic children or young people. | The review aims to explore how practices support Autistic CYP. |
| 2. Concept | Neurodiversity. | Does not refer to neurodiversity. | The review aims to focus on the neurodiversity concept. |
| 3. Context | Psychology practices that support Autistic CYP. This includes assessment for autism, and support intervention, therapeutic and behavioural support. | Music therapy, counselling, couples therapy, education settings, speech & language therapy, occupational therapy, social work, play therapy. | The review aims to examine what recommendations psychologists can use in practice. |
| 4. Study Focus | Publications that focus on how psychologists/professionals can support Autistic CYP using neurodiversity informed practice. | Publications that do not focus on how to support Autistic individuals using neurodiversity informed practice. | The aim of the review is to explore how professionals can use neurodiversity-affirming practices to support Autistic children or young people. |

| Review Category | Inclusion criteria | Exclusion criteria | Rationale |
|------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 5. Time Period | Studies published between 2013-2024 | Studies published before 2013 | The review aims to explore the most up-to-date research |
| 6. Language | English | Written in a language other than English | Time/constraints do not allow for transcription |
| 7. Types of Evidence | Journal articles, review papers | Books, Book reviews, thesis/dissertations, book chapters, conference abstracts, magazine/website articles, papers not accessible on university databases | Peer-reviewed articles were included to ensure review integrity |

Figure 2.1
Flow Diagram of Study Selection (March 2023)

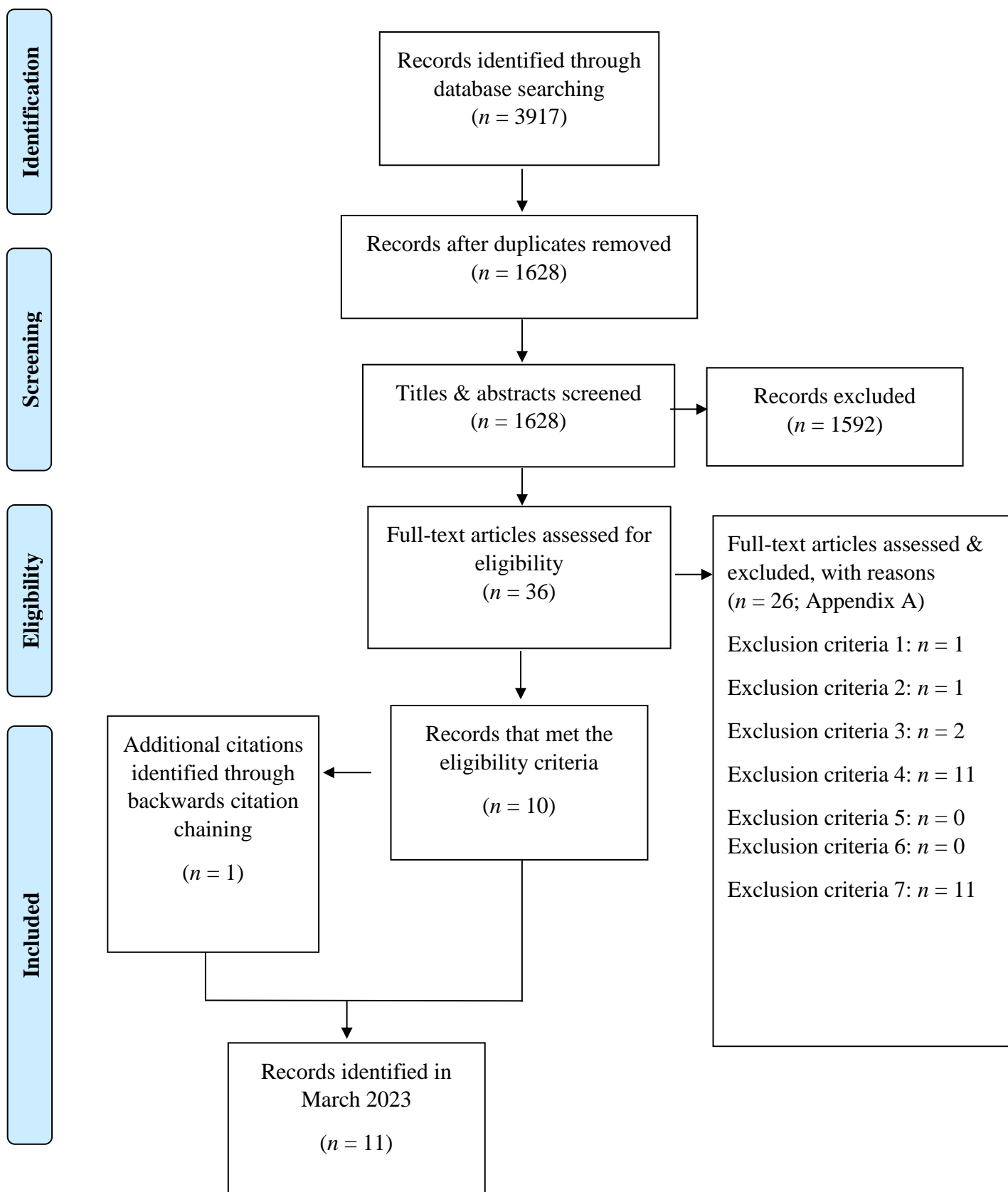


Figure 2.2
Flow Diagram of Study Selection (January 2024)

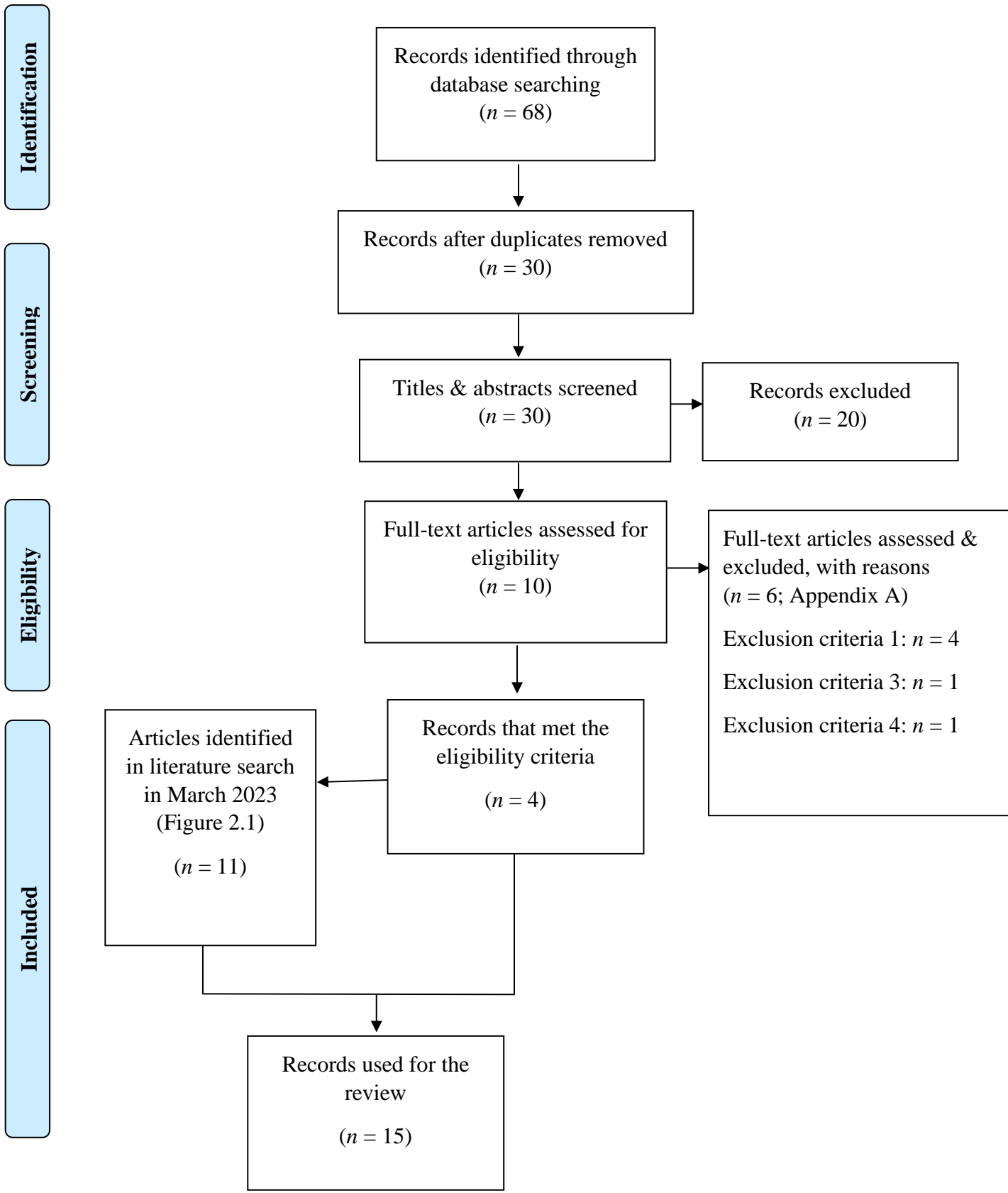


Table 2.7*References included in the Review*

Full References

Brown, H. M., Stahmer, A. C., Dwyer, P., & Rivera, S. (2021). Changing the story: How diagnosticians can support a neurodiversity perspective from the start. *Autism: The International Journal of Research & Practice*, 25(5), 1171-1174.
<https://doi.org/10.1177/13623613211001012>

Chapman, R., & Botha, M. (2023). Neurodivergence-informed therapy. *Developmental Medicine & Child Neurology*, 65(3), 310-317. <https://doi.org/10.1111/dmcn.15384>

Cherewick, M. (2023). Future directions for neurodiversity affirming autism interventions: Adolescence is a second sensitive period to support positive developmental trajectories. *Current Psychology*, 43(10), 9191-9198.
<https://doi.org/10.1007/s12144-023-05053-7>

Cherewick, M., Matergia, M. (2023). Neurodiversity in Practice: a Conceptual Model of Autistic Strengths and Potential Mechanisms of Change to Support Positive Mental Health and Wellbeing in Autistic Children and Adolescents. *Advances in Neurodevelopmental Disorders*, 1-15 <https://doi.org/10.1007/s41252-023-00348-z>

Dawson, G., Franz, L., & Brandsen, S. (2022). At a Crossroads—Reconsidering the goals of autism early behavioral intervention from a neurodiversity perspective. *JAMA Pediatrics*, 176(9), 839-840. <https://doi.org/10.1001/jamapediatrics.2022.2299>

Fletcher-Watson, S. (2022). Transdiagnostic research and the neurodiversity paradigm: Commentary on the transdiagnostic revolution in neurodevelopmental disorders by Astle et al. *Journal of Child Psychology and Psychiatry*, 63(4), 418-420.
<https://doi.org/10.1111/jcpp.13589>

Heselton, G. A. (2023). Childhood adversity, resilience, and autism: a critical review of the literature. *Disability & Society*, 38(7), 1251-1270.
<https://doi.org/10.1080/09687599.2021.1983416>

Izuno-Garcia, A. K., McNeel, M. M., & Fein, R. H. (2023). Neurodiversity in promoting the well-being of children on the autism spectrum. *Child Care in Practice*, 29(1), 54-67. <https://doi.org/10.1080/13575279.2022.2126436>

Leadbitter, K., Buckle, K. L., Ellis, C., & Dekker, M. (2021). Autistic self-advocacy and the neurodiversity movement: Implications for autism early intervention research and practice. *Frontiers in Psychology*, 12.
<https://doi.org/10.3389/fpsyg.2021.635690>

Ne’eman A. (2021). When Disability Is Defined by Behavior, Outcome Measures Should Not Promote “Passing”. *AMA journal of Ethics*, 23(7), E569–E575.

<https://doi.org/10.1001/amajethics.2021.569>

Ricco, A., Kapp, S. K., Jordan, A., Dorelien, A. M., & Gillespie-Lynch, K. (2020). How is autistic identity in adolescence influenced by parental decisions and perceptions of autism? *Autism*, 25 (2), 374–388. <https://doi.org/10.1177/1362361320958214>

Schuck, R. K., Tagavi, D. M., Baiden, K. M. P., Dwyer, P., Williams, Z. J., Osuna, A., Ferguson, E. F., Jimenez Muñoz, M., Poyser, S. K., Johnson, J. F., & Vernon, T. W. (2022). Neurodiversity and Autism Intervention: Reconciling Perspectives Through a Naturalistic Developmental Behavioral Intervention Framework. *Journal of Autism and Developmental Disorders*, 52(10), 4625–4645.

<https://doi.org/10.1007/s10803-021-05316-x>

Schwartzman, J. M., Roth, M. C., Paterson, A. V., Jacobs, A. X., & Williams, Z. J. (2023). Community-guided, autism-adapted group cognitive behavioral therapy for depression in autistic youth (CBT-DAY): Preliminary feasibility, acceptability, and efficacy. *Autism*, 0(0). <https://doi.org/10.1177/13623613231213543>

Sonuga-Barke, E., & Thapar, A. (2021). The neurodiversity concept: is it helpful for clinicians and scientists? *The Lancet Psychiatry*, 8(7), 559-561.

[https://doi.org/10.1016/S2215-0366\(21\)00167-X](https://doi.org/10.1016/S2215-0366(21)00167-X)

Turowetz, J., Wiscons, L. Z., & Maynard, D. W. (2023). Disorder or difference? How clinician-patient interaction and patient age shape the process and meaning of autism diagnosis. *Sociology of Health & Illness*, 46(S1), 171-188.

<https://doi.org/10.1111/1467-9566.13611>

2.7.1.4 Stage 4: Charting the data. A table in Microsoft Word was used for data extraction, which included information on the author(s), year and place published, type of article, topic, and article focus, as well as conclusions and recommendations of the paper. A charting table with the data of included studies for this review can be found in Appendix B.

2.7.1.5 Stage 5: Collating, summarising, and reporting results. Articles included in the review were summarised by their year, publication location and record type.

2.7.1.5.1 Year of Publication. Although the review aimed to examine literature from the past ten years, all included records were published between 2017-2023. This suggests a

recent increase in publications focusing on neurodiversity-affirmative practices over the past six years.

2.7.1.5.2 Location of Publication. Articles included in this review were published in the UK ($n = 4$), North America ($n = 10$), and Canada ($n = 1$).

2.7.1.5.3 Record Type. All records included in this review were peer-reviewed. Records included were eight review papers (Chapman & Botha, 2023; Cherewick, 2023; Cherewick & Matergia, 2023; Heselton, 2023; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Ne'eman, 2021; Sonuga-Barke & Thapar, 2021), two commentaries (Fletcher-Watson, 2022; Schuck et al., 2022), one editorial (Brown et al., 2021), one viewpoint (Dawson et al., 2022), and three empirical studies which investigated parental disclosure/withhold of autism diagnosis on Autistic adolescents perceptions of autism and identity development (Riccio et al., 2021), a group CBT intervention on adolescent depression, emotional reactivity, and self-esteem (Schwartzman et al., 2023), and how a child's age can influence professional's formulation of autism (Turowetz et al., 2023). Appendix C includes a mapping table of empirical studies included in this review.

2.7.1.5.4 Robustness of the Literature. The robustness of the evidence in the scoping review was evaluated based on the guidelines provided by Thomas et al. (2017). As all records included in the scoping review were peer-reviewed, this indicates a rigorous evaluation process by experts in the field, ensuring the credibility and reliability of the information presented. However, the predominant inclusion of review papers raised potential concerns regarding bias. Review papers, while valuable for synthesising existing literature, may introduce biases inherent to the authors' interpretations. This suggests that there is currently little empirical evidence available that examines the outcomes of neurodiversity-affirmative approaches with Autistic CYP. Therefore, it is crucial to interpret these results with caution and acknowledge the need for more robust and comprehensive research in this area.

2.7.2 Key Review Findings

A thematic approach to summarising the literature was chosen due to the variation in research designs. Initial coding was carried out on NVivo by conducting line-by-line coding of the articles. Initial codes were only created if they informed the review question. For empirical

papers, only the results and discussion sections were coded. Related codes were then grouped together to form descriptive themes.

Three key themes were discovered and included in an inductive conceptual framework. Neurodiversity-affirmative psychological approaches to support Autistic children included i) assessment, ii) intervention and iii) therapy approaches (Figure 2.3). Articles that provided evidence for each theme and subtheme are included in Appendix D. An overview of the suggested neurodiversity-affirmative actions found in the scoping review is outlined in Table 2.8.

Figure 2.3

Scoping Review Themes and Subtheme

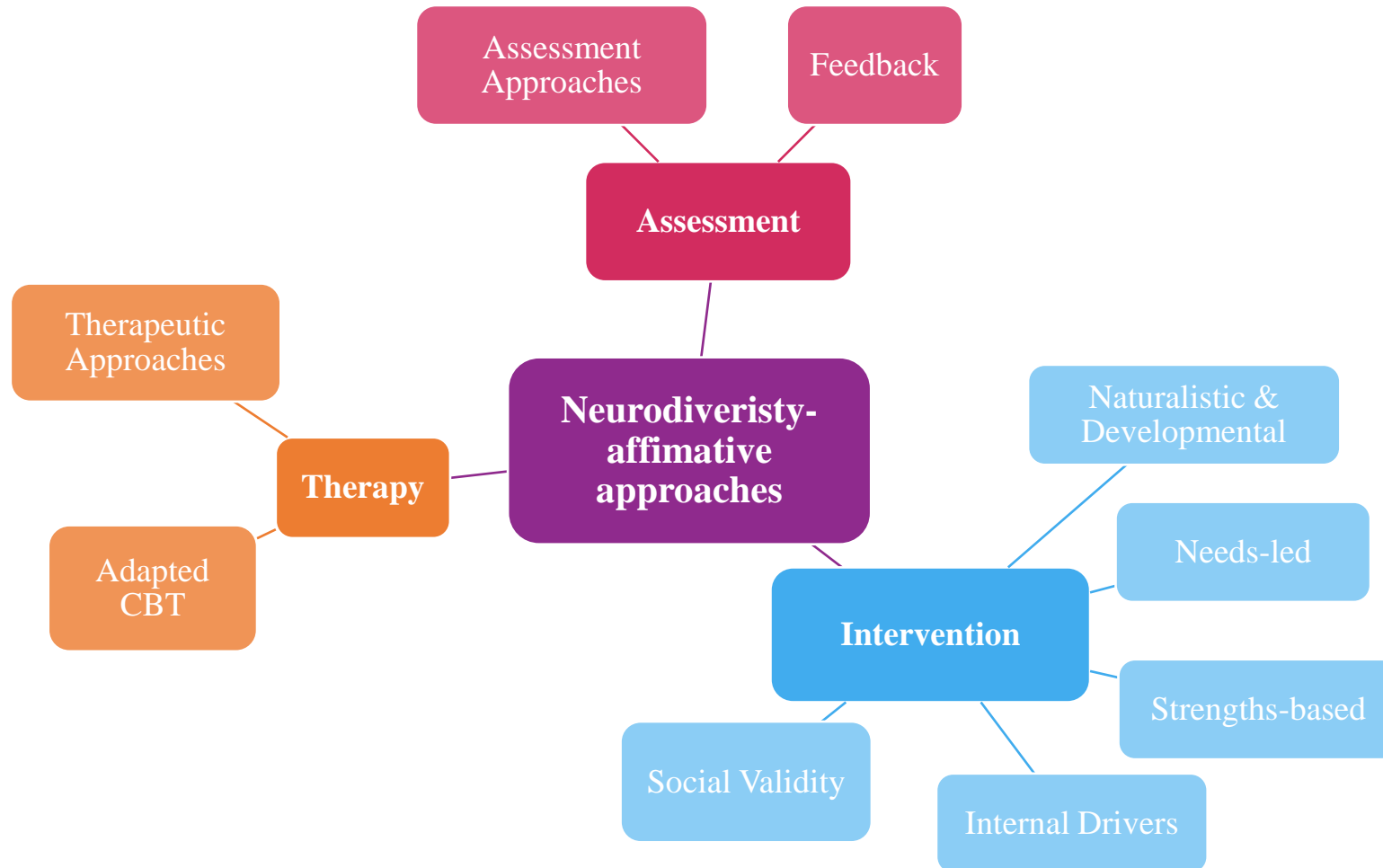


Table 2.8

Overview of the Suggested Neurodiversity-affirmative Actions included in the Scoping Review

| Theme | Subtheme | Suggested Neurodiversity-affirmative Actions | Source |
|--------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Assessment | Assessment Approaches | <ul style="list-style-type: none"> - Consider transitions during assessments and use visual/auditory cues. - Be aware of child's preferences and interests before assessment. - Use neurodiversity-affirmative approaches to explore social or behavioural differences. - View autism diagnosis as a 'process,' emphasising difference rather than deficit. - Partner with parents and involve them in the assessment process. - Make neurodiversity-affirmative resources available to families from the beginning of the assessment process. | Brown et al., 2021; Izuno-Garcia et al., 2023; Schuck et al., 2022; Turowetz et al., 2023 |
| | Feedback | <ul style="list-style-type: none"> - Identify areas where parents may require more support during feedback. - Use warm, positive tone during feedback. - Move away from deficit-focused language and adopt strengths-based, neurodiversity-affirming language. - Support parents in disclosing autism to their child, offering psychoeducation about neurodiversity. | Brown et al., 2021; Izuno-Garcia et al., 2023; Riccio et al., 2021; Schuck et al., 2022; Turowetz et al., 2023 |

| | | | |
|--------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intervention | Naturalistic and Developmental | <ul style="list-style-type: none"> - Focus on quality of life, functional goals, and adaptive skills. - Reject normative agenda to avoid reducing Autistic characteristics. - Align interventions with the Autistic child's developmental trajectory. - Consider differences in Autistic interactions, social preferences, and sensory sensitivities. - Collaborate with parents, consider their goals, and involve them in decision-making. | Brown et al., 2021; Cherewick, 2023; Dawson et al., 2022; Fletcher-Watson, 2022; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Ne'eman, 2021; Schuck et al., 2022; Sonuga-Barke & Thapar, 2021 |
| | Strengths-based | <ul style="list-style-type: none"> - Identify Autistic strengths and build upon them when designing psychosocial interventions. | Brown et al., 2021; Cherewick & Matergia, 2023; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022 |
| | Needs-led | <ul style="list-style-type: none"> - Shift focus from 'fixing' to supporting needs and consider environmental accommodations. | Fletcher-Watson, 2022; Sonuga-Barke & Thapar, 2021 |
| | Internal Drivers | <ul style="list-style-type: none"> - Consider Autistic children's natural reinforcements and preferences during interventions. | Brown et al., 2021; Dawson et al., 2022; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022; Sonuga-Barke & Thapar, 2021 |
| | Social Validity | <ul style="list-style-type: none"> - Assess the social validity of interventions and collaborate with the Autistic community. - Collect feedback from professionals, caregivers, and Autistic individuals. - Modify measures for non-speaking individuals and consider cultural differences. - Assess the Autistic child's or young person's attendance, engagement, and emotional state throughout interventions to ensure the intervention is socially valid. - Use quality of life measures to ensure a positive impact on an individual's life. | Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022 |

| | | | |
|---------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Therapy | Therapeutic Approaches | <ul style="list-style-type: none"> - Cultivate epistemic humility, support and collaboration between client and therapist. - Gain epistemic agency by listening to the Autistic community. - Use a strengths-based approach and explore Autistic pride with the client. - View interpersonal conflict as relational, not attributing solely to the client's neurology. - Focus on the interaction between Autistic identity, childhood adversity and resilience to support mental health needs. | Chapman & Botha, 2023; Heselton, 2023; Schuck et al., 2022 |
| | Adapted CBT | <ul style="list-style-type: none"> - Tailor CBT to be Autistic-friendly. - Include examples of the lived experiences of being Autistic. - Use multiple modalities (e.g. visual, verbal, written) and approaches (e.g. large/small group discussions, games, and individual activities). - Accommodate for sensory sensitivities and self-regulation strategies. | Schwartzman et al., 2023 |

2.7.2.1 Theme 1: Assessment. Two subthemes were identified for the assessment theme: i) assessment approaches, and ii) feedback.

2.7.2.1.1 Assessment Approaches. Neurodiversity-affirmative assessment practices were presented in four of the papers included in this review (Brown et al., 2021; Izuno-Garcia et al., 2023; Schuck et al., 2022; Turowetz et al., 2023). During assessments with Autistic children, it is suggested that professionals be aware of any transitions during the assessments. The number of transitions may be decreased, or visual/auditory cues for transitions may be used to support the Autistic child in feeling more at ease (Izuno-Garcia et al., 2023). Professionals are advised to also be aware of the child's preferences and interests before the assessment, which may assist as a reinforcement to motivate and keep their attention (Izuno-Garcia et al., 2023). Along with using standardised measures when carrying out an autism assessment, professionals can also use neurodiversity-affirmative approaches to explore the potential masking of social or behavioural differences (Izuno-Garcia et al., 2023). Izuno-Garcia et al. (2023) included example questions on how to explore this. To explore social camouflaging, professionals could ask, "Do you watch others' facial expressions to know how to emotionally react or present?" (Izuno-Garcia et al., 2023, p. 60). Suggested questions to explore behavioural masking include, "Do you purposely sit on your hands to minimize stimming?" (Izuno-Garcia et al., 2023, p. 60).

When carrying out an autism assessment, it is suggested that professionals view autism diagnosis as a 'process,' and assessment tools and practices should be centred around autism as a difference rather than a deficit (Turowetz et al., 2023). This view should also be applied to the formulation process to lessen stigma and improve self-image (Turowetz et al., 2023). Professionals should partner with parents and children (depending on their age) and become familiar with the family throughout the assessment process (Brown et al., 2021; Turowetz et al., 2023). Neurodiversity-affirmative resources should also be made available to families from the beginning of the assessment process (Schuck et al., 2022). For example, providing resources on reports, such as the Autistic Self Advocacy Network's publication- 'Start Here: A Guide for Parents of Autistic Kids' (Autistic Self Advocacy Network, 2021; Schuck et al., 2022).

2.7.2.1.2 Feedback. Neurodiversity-affirmative suggestions for giving feedback using a neurodiversity-affirmative approach were included in five of the papers reviewed in this review (Brown et al., 2021; Izuno-Garcia et al., 2023; Riccio et al., 2021; Schuck et al., 2022; Turowetz

et al., 2023). Similar to the collaboration with parents throughout the assessment process, during the feedback regarding the assessment, professionals should identify areas where parents may require more support (Brown et al., 2021). This can be done by asking parents what their understanding of autism is to determine their support needs and identify necessary information that may be helpful to share (Brown et al., 2021). During feedback, it is suggested that professionals advise parents of services that use a neurodiversity-affirmative approach and potential 'red flags' within services that do not apply a neurodiversity-affirmative approach. Red flags may include a lack of differentiation for Autistic children in the curriculum or a focus on changing behaviours to fit with neurotypical norms (Izuno-Garcia et al., 2023).

Professionals should know that the language used during feedback can influence the parent's views of autism in the future (Brown et al., 2021). Professionals should use a warm, positive tone when delivering assessment feedback to support parents' emotional reactions (Brown et al., 2021). It is suggested that professionals should move away from using deficit-focused language to a more strengths-based, neurodiversity-affirming way (Brown et al., 2021). For example, the term 'deficit' can be changed to 'area of challenge or difficulty,' and 'co-morbid' can be changed to 'co-occurring' (Brown et al., 2021). Neurodiversity-affirmative professionals were found to present autism as a part of the child's or young person's identity (Turowetz et al., 2023). Additionally, they used strengths-based language by emphasising the Autistic strengths of the child, which they should be proud of (Turowetz et al., 2023). Importantly, it is suggested that professionals should be aware that an assessment was carried out due to concerns raised previously, and these concerns should not be ignored during the feedback (Brown et al., 2021). Instead, a discussion of the child's areas of strengths and needs in terms of their overall functioning and environmental difficulties should be discussed and identify ways to support their needs (Brown et al., 2021; Turowetz et al., 2023).

Because the NP views autism as part of one's identity, professionals should support parents in disclosing this to their child. This should be done by professionals supporting parents with information on how to present this information to their child in a developmentally appropriate way (Izuno-Garcia et al., 2023). It is suggested that psychoeducation about neurodiversity is offered to parents during feedback, which may be given by Autistic employees (Schuck et al., 2022). Alternatively, professionals may explain autism to the young person by

describing the individual's strengths and difficulties they may experience (Turowetz et al., 2023). Professional practicing neurodiversity approaches also described autism as a 'difference' on a spectrum, allowing Autistic people to think differently than neurotypical individuals (Turowetz et al., 2023). By explaining autism as a difference, professionals explained how some things they might find easier or more difficult than others (Turowetz et al., 2023). Autistic adolescents whose parents disclosed autism using a neurodiversity-affirmative approach were more able to identify the strengths of being Autistic (Riccio et al., 2021). Practicing neurodiversity-affirming professionals also explained the NM during feedback (Turowetz et al., 2023).

2.7.2.2 Theme 2: Intervention. Within the theme of intervention, four subthemes were identified: i) naturalistic and developmental interventions, ii) needs-led, iii) internal drivers, and iv) social validity.

2.7.2.2.1 Naturalistic and Developmental. Naturalistic and developmental approaches to interventions were the most reported neurodiversity-affirmative approach that was included in the reviewed papers, as this approach was reported in nine of the included papers (Brown et al., 2021; Cherewick, 2023; Dawson et al., 2022; Fletcher-Watson, 2022; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Ne'eman, 2021; Schuck et al., 2022; Sonuga-Barke & Thapar, 2021). Naturalistic and developmental interventions aim to promote quality of life (QoL) (Dawson et al., 2022; Fletcher-Watson, 2022; Izuno-Garcia et al., 2023). This can include fostering functional goals and adaptive skills such as independence, communication of needs, and building relationships as much as possible (Brown et al., 2021; Dawson et al., 2022; Izuno-Garcia et al., 2023).

Focusing on the QoL and functional and communication goals whilst using a strengths-based approach aims to enhance Autistic individuals' autonomy (Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022). Therefore, these interventions reject a normative agenda that focuses on reducing diagnostic characteristics, as this may interfere with an Autistic child's or young person's natural coping strategies and development (Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Ne'eman, 2021). Instead, naturalistic and developmental behavioural interventions focus on teaching skills rather than reducing Autistic features (Schuck et al., 2022). Naturalistic and developmental interventions align with the Autistic child's developmental

trajectory (Leadbitter et al., 2021). Additionally, focusing on adapting environments to make them suitable for Autistic people is one of the most natural ways Autistic children can be supported (Sonuga-Barke & Thapar, 2021). Hence, there needs to be a suitable 'goodness of fit' between an Autistic child and the social, emotional, and physical environment (Leadbitter et al., 2021).

When aiming to develop an Autistic child's reciprocal social interactions, it is suggested that professionals and parents should be aware that Autistic individuals' communication may present differently (Ne'eman, 2021). Therefore, adjustments to neurotypical interactions may need to be made rather than only focusing on the Autistic child's interactions (Dawson et al., 2022). Professionals must know the Autistic child's social preferences and sensory sensitivities (Dawson et al., 2022). For example, knowing whether they would prefer face-to-face or parallel interactions and understanding their social cues for wanting to initiate and finish an interaction (Dawson et al., 2022).

It is suggested that professionals should be aware of parents' vital information and knowledge of their children by exploring their strengths and areas of need (Schuck et al., 2022). Additionally, the goals of the intervention should be meaningful for families (Izuno-Garcia et al., 2023). Professionals should also collaborate with parents when discussing recommendations and support, making sure they are developmentally appropriate in order for them to have agency over the decisions made (Izuno-Garcia et al., 2023; Schuck et al., 2022). This can be done by including families in the decisions being made, supporting them with interventions, and enquiring with parents about their child's preferences (Schuck et al., 2022). Some parental concerns may wish to modify or reduce Autistic characteristics (Ne'eman, 2021). In this instance, professionals must consider ethical considerations and the potential harm of these approaches while examining these requests (Ne'eman, 2021).

Schuck et al. (2022) described how Naturalistic Developmental Behavioral Interventions (NDBIs) fit with the NP. NDBI is based on developmental and behavioural theories in which skills are learned. NDBIs are used naturally during a child's daily routine (Schuck et al., 2022). It is a dynamic and child-led approach, as the child actively participates in the intervention rather than professionals following a ridged intervention plan (Schuck et al., 2022). This allows the

child to learn from meaningful experiences by naturally reinforcing their preferences (Schuck et al., 2022).

In relation to Autistic adolescents, Cherewick (2023) proposed that interventions are more effective when they are aligned to specific developmental periods. As adolescents experience a second sensitive period with a heightened level of neuroplasticity in the brain, Cherewick (2023) suggests that interventions should target social-motivational learning and executive functioning skills. In particular, during early adolescence, interventions should focus on social and motivational learning, including peer and teacher-mediated approaches that include intrinsic motivators such as special interests and preferences (Cherewick, 2023). During mid-late adolescence, interventions should then scaffold on gains made previously. They should target executive functioning and adaptive skills to support independence whilst being tailored to the individuals' contexts (Cherewick, 2023).

2.7.2.2 Strengths-based. Six papers suggest applying a strengths-based approach when supporting Autistic CYP (Brown et al., 2021; Cherewick & Matergia, 2023; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022). This approach empowers parents to recognise and nurture their child's inherent strengths, fostering a supportive environment and enhancing collaboration between parents and professionals (Brown et al., 2021; Izuno-Garcia et al., 2023). Additionally, it is suggested that professionals recognise and build upon each child's unique strengths and needs rather than adhering to a one-size-fits-all approach (Izuno-Garcia et al., 2023; Leadbitter et al., 2021). Furthermore, interventions guided by a strengths-based model aim to enhance the well-being and QoL of Autistic individuals by focusing on their passions, interests, and preferences. By incorporating activities that bring joy and fulfillment, interventions can not only reduce negative emotions, but also facilitate genuine social connections and skill development (Schuck et al., 2022; Leadbitter et al., 2021).

Cherewick and Matergia (2023) suggest that Autistic strengths of Autistic CYP can be built upon when designing psychosocial interventions to support positive mental health and well-being. This review identified four strength domains: perceptual, reasoning, expertise, and character strengths (Cherewick & Matergia, 2023). These researchers also proposed a conceptual model based on these Autistic strength domains and suggest applying these to mechanisms of

change in the areas of affective, behavioural, cognitive, and physiology in order to support Autistic CYP's mental health (Cherewick & Matergia, 2023).

2.7.2.2.3 Needs-led. A needs-led approach was referenced in two of the included studies in this review paper (Fletcher-Watson, 2022; Sonuga-Barke & Thapar, 2021). The neurodiversity-affirmative approach also intends to shift its focus from trying to 'fix' individuals to supporting their needs, for example, by putting environmental accommodations in place for Autistic individuals (Sonuga-Barke & Thapar, 2021). Fletcher-Watson (2022) suggests that neurodiversity-affirmative approaches align with a transdiagnostic approach, which focuses on a person's overall needs rather than their diagnosis. This shift in thinking may impact access to future services that rely on a diagnostic label when delivering support (Fletcher-Watson, 2022).

2.7.2.2.4 Internal Drivers. Recognising an Autistic child's or young person's internal drivers is also an essential consideration and was discussed in five of the reviewed papers (Brown et al., 2021; Dawson et al., 2022; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022; Sonuga-Barke & Thapar, 2021). It is suggested that Autistic children's preferences when deciding on an intervention are considered (Dawson et al., 2022; Izuno-Garcia et al., 2023; Leadbitter et al., 2021). This will support their self-advocacy skills and increase their enjoyment and motivation during the intervention (Dawson et al., 2022). Intervention goals should focus on developing the child's adaptive functioning skills and QoL (Brown et al., 2021). For example, interventions can focus on a child's strengths and interests to develop play and social skills (Brown et al., 2021). By using a child's interests as a naturalistic reinforcer, the goal is not to normalise behaviour but to allow them to develop their skills meaningfully and enjoyably (Schuck et al., 2022). For instance, a preferred item may be used to allow an Autistic child to build conversation skills with another child with the same interest, which allows the topic of conversation to be a reinforcer to the child (Schuck et al., 2022). It is suggested that professionals support parents in identifying their child's preferences to support them to connect with their child (Dawson et al., 2022). Additionally, focusing on the Autistic child's or young person's strengths will give them a more positive view of themselves (Sonuga-Barke & Thapar, 2021). As collaboration is essential when identifying the family's goals, professionals must be aware that parents' goals and their child's preferences may not align, for example, teaching adaptive skills such as hygiene (Izuno-Garcia et al., 2023). As these adaptive and functional

skills are developmentally appropriate and do not focus on normalising behaviour, these skills would align with the NP (Izuno-Garcia et al., 2023).

2.7.2.2.5 Social Validity. The social validity of intervention approaches to ensure they align with the NP was reported in three of the reviewed articles (Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022). It is suggested that professionals should be aware of the social validity of the interventions they are recommending (Schuck et al., 2022).

Professionals can assess the social validity of interventions in several ways. Professionals should collaborate with stakeholders in the Autistic community to learn about appropriate intervention targets and what areas Autistic individuals look for additional support (Izuno-Garcia et al., 2023; Leadbitter et al., 2021). This may also be done by hiring Autistic professionals (Schuck et al., 2022). Intervention feedback can also be collected (Schuck et al., 2022). This can be done by assessing the professional's and caregiver's views of the intervention and providing self-reports to the Autistic individual to ensure that their perspectives of the intervention are gathered (Schuck et al., 2022). To ensure the Autistic person's voice is heard, measures may need to be modified and available for non-speaking individuals (Schuck et al., 2022). It is suggested that professionals seek feedback from community providers regarding the measures (Schuck et al., 2022). Measures should also be statistically valid rather than relying heavily on subjectivity and acknowledge cultural differences and biases (Schuck et al., 2022). Other methods of assessing the social validity of interventions include exploring the client's attendance, engagement, and emotional state throughout (Schuck et al., 2022). If the Autistic child or young person has negative reactions to the intervention, this may infer that the intervention is not socially valid (Schuck et al., 2022). It is also suggested that QoL measures are used to ensure a positive link between the interventions and a person's life (Schuck et al., 2022). Professionals can also talk about the intervention goals with the Autistic child, where developmentally appropriate (Schuck et al., 2022).

It is also suggested that professionals consider accepting Autistic differences whilst supporting development when creating intervention goals (Schuck et al., 2022). It may be helpful for professionals to imagine the Autistic child as an adult reading their support plans (Schuck et al., 2022). Professionals can ask whether reasonable supports have been put in place, whether the goals are offensive, or do not accept Autistic identity (Schuck et al., 2022).

2.7.2.3 Theme 3: Therapy. Two subthemes were identified within this theme: i) Therapeutic approaches and ii) Adapted CBT.

2.7.2.3.1 Therapeutic Approaches. Neurodiversity-affirmative therapy approaches were reported in three of the papers included in this review (Chapman & Botha, 2023; Heselton, 2023; Schuck et al., 2022). It is suggested that professionals carrying out therapy with Autistic individuals should also be aware of the NP and apply this learning to therapeutic work. By doing this, neurotypical professionals can cultivate epistemic humility and support the collaboration between the client and the therapist (Chapman & Botha, 2023). Epistemic agency can be gained by therapists listening to the Autistic community (Chapman & Botha, 2023). This can enable the Autistic child or young person to use therapy to support or embrace their differences (Chapman & Botha, 2023). Professionals are advised to ensure that the agency around which neurodivergences are addressed during therapy is always kept in the therapeutic process (Chapman & Botha, 2023). It is suggested that professionals are conscious of using a strengths-based approach and explore Autistic pride with the Autistic child or young person to support any individualised stigma that they may be experiencing (Chapman & Botha, 2023). Any interpersonal conflict experienced should be viewed as relational rather than blaming it on the Autistic child's or young person's differences (Chapman & Botha, 2023; Schuck et al., 2022). This can be done by viewing any interpersonal conflict arising from differences in views or communication styles rather than because of the Autistic person (Chapman & Botha, 2023).

Additionally, as Autistic children can experience more childhood adversity than their neurotypical peers, professionals can take a neurodiversity lens to ensure a holistic approach to mental health support is applied (Heselton, 2023). This includes focusing on the interaction between Autistic identity, childhood adversity and resilience to support mental health needs whilst ensuring that the Autistic child or young person is considered the expert of their own experiences to ensure their own insights are voiced (Heselton, 2023).

2.7.2.3.2 Adapted Cognitive Behavioural Therapy (CBT). One study reported applying neurodiversity-affirmative approaches to support Autistic adolescents who experience depression (Schwartzman et al., 2023). A preliminary study to investigate the feasibility, acceptability, and efficacy of adapted CBT for depression, 'cognitive behavioural therapy for depression of autistic youth' (CBT-DAY) group intervention was conducted with 24 Autistic adolescents aged 11-17

(Schwartzman et al., 2023). The intervention targeted emotional dysregulation and negative self-esteem using neurodiversity-affirmative approaches to improve depressive symptoms (Schwartzman et al., 2023). Neurodiversity-affirmative treatment engagement, content, and delivery strategies were applied throughout the group intervention (Schwartzman et al., 2023). Neurodiversity-affirmative treatment engagement strategies included discussions around individuals' views of Autistic identity, group expectations, self-regulation strategies, and discussion of individual interests (Schwartzman et al., 2023). Neurodiversity-affirmative approaches to the intervention content included providing lived and real-world experiences of events and situations that are particularly stressful for Autistic individuals (Schwartzman et al., 2023). Treatment delivery used multiple modalities (e.g. visual, verbal, written) and approaches (e.g. large/small group discussions, games, and individual activities), as well as sensory accommodations to group participants (Schwartzman et al., 2023). This preliminary study showed that CBT-DAY was feasible to use in an outpatient clinical setting and was acceptable for Autistic adolescents and their caregivers (Schwartzman et al., 2023). Additionally, the intervention improved participants' self-esteem, emotional reactivity, and depressive symptoms (Schwartzman et al., 2023).

2.8 Conclusion

This review aimed to provide professionals with suggested actions on how to support Autistic CYP by using a neurodiversity-affirmative approach. A scoping review was used to explore what has been published in neurodiversity-affirmative practice (Munn et al., 2018).

Fifteen studies met the review inclusion criteria and were examined by the researcher. This review demonstrates the growing body of literature published in recent years, as all included studies were published between 2017 and 2023, despite the inclusion criteria aiming to include articles in the last ten years. This may be due to the increasing prevalence of autism and the public interest in the NM. However, it is crucial to acknowledge that the field of neurodiversity-affirmative practice is still developing, and the body of research remains relatively limited.

The review identified three key themes related to neurodiversity-affirmative practices for supporting Autistic CYP and their families: assessment, intervention, and therapy approaches. While these findings offer valuable insights, they should be interpreted with caution due to the

preliminary nature of the research. As the field evolves, further studies are needed to deepen understanding and refine these practices. Future research should aim to build on the current knowledge base and address the gaps identified, ensuring that neurodiversity-affirmative approaches are effectively tailored to the needs of Autistic CYP and their families.

2.8.1 Assessment

From this review's findings, several suggested actions were found in relation to adapting assessment practices to a more neurodiversity-affirmative approach. Key suggested actions included minimising and supporting transitions, using visual/auditory cues, exploring social and behavioural masking, and understanding the Autistic child's or young person's preferences (Izuno-Garcia et al., 2023). Professionals should view the assessment as a 'process' and collaborate with parents throughout (Brown et al., 2021; Turowetz et al., 2023). It is suggested that professionals view autism through the neurodiversity lens and provide parents with neurodiversity psychoeducation and resources (Schuck et al., 2022). Assessment feedback is advised to be delivered in a warm and positive tone, using strength-based and neurodiversity-affirmative language while also considering the Autistic child's or young person's needs (Brown et al., 2021; Turowetz et al., 2023). Additionally, autism can be discussed as part of the child's or young person's identity, which includes many strengths (Turowetz et al., 2023). Parental advice and information on explaining autism to the child or young person is also suggested (Izuno-Garcia et al., 2023).

These suggested assessment approaches are similar to the PSI's assessment guidelines, which advise that professionals use positive and hopeful statements and a needs-led approach in line with the NP (PSI, 2022). Additionally, as the assessment process can be stressful for parents (Makino et al., 2021; PSI, 2022), using a collaborative and neurodiversity-affirmative approach may allow psychologists to better support the children and families they are working with.

Although the findings from this review note the importance of using strength-based and neurodiversity-affirmative language during assessment, psychologists are still required to use standardised assessment tools and diagnostic criteria, which use deficit-based language (NICE, 2011; PSI, 2022; Rutherford & Johnston, 2022). Therefore, there is a disconnect between the PSI's (2022) guidelines for applying a neurodiversity-affirmative approach and the tools available to psychologists.

2.8.2 *Intervention*

Neurodiversity-affirmative intervention approaches suggested in the findings include adopting naturalistic and developmental strategies, strengths-based and needs-led approaches, recognition of the Autistic child or young person's internal drivers, and a focus on social validity to ensure alignment with the NP. Reviewed papers were found to have the most suggested actions within the intervention theme. This may be due to the debate regarding behavioural interventions which focus on reducing Autistic characteristics. The findings emphasise the importance of taking a neurodiversity-affirmative approach to identify an Autistic child's strengths and needs.

Naturalistic and developmental approaches to interventions reject a normative agenda that focuses on reducing diagnostic characteristics, as this may interfere with an Autistic child's or young person's natural coping strategies and development (Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Ne'eman, 2021). This approach aligns with the Autistic child's developmental trajectory (Leadbitter et al., 2021) and ways of communicating and interacting (Dawson et al., 2022; Ne'eman, 2021). This includes using a strengths-based approach to develop functional goals and adaptive skills that focus on the Autistic child's or young person's QoL (Brown et al., 2021; Dawson et al., 2022; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022). Environmental adaptations can be made to ensure a 'goodness of fit' between an Autistic child and the social, emotional, and physical environment (Leadbitter et al., 2021; Sonuga-Barke & Thapar, 2021). Additionally, a collaborative approach to creating intervention goals should also be considered to ensure they are developmentally appropriate, neurodiversity-affirmative, and meaningful for families (Cherewick, 2023; Izuno-Garcia et al., 2023; Schuck et al., 2022). This collaborative approach is similar to the NICE (2013) good practice guidelines, which recommend that psychosocial interventions be delivered at developmentally appropriate levels and increase parents' and teachers' understanding of the child's needs (NICE, 2013). Interestingly, this review's naturalistic and developmental approaches take a similar stance to Dwyer's (2022) interactionist/ecological definition of the neurodiversity approach. Dwyer (2022) proposed that interventions should support developing individuals' skills whilst also focusing on putting in place environmental support for Autistic individuals. Professionals should also consider a child's natural reinforcements and preferences

when planning interventions, promoting self-advocacy skills, and enhancing motivation in a meaningful and enjoyable way (Dawson et al., 2022; Schuck et al., 2022).

For professionals to ensure interventions are aligned with the NP, it was suggested that they explore the social validity of interventions. This can be done by collaborating with Autistic stakeholders or professionals (Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022). Intervention feedback in terms of gaining the Autistic child's or young person's or their parent's views can also be gathered, as well as exploring the client's attendance, engagement, emotional state, and negative reactions throughout (Schuck et al., 2022). Gaining the Autistic communities' opinion is an essential consideration within the NP due to their own lived experiences (Gillespie-Lynch et al., 2017). Intervention approaches suggested in this review have moved away from approaches like ABA. This may be due to the advocacy that rejects ABA approaches, similar to the stances taken by the Irish autism charity AsIAM (2022b).

Overall, the neurodiversity-affirmative intervention approaches suggested in the papers included in the scoping review align with many of the intervention principles that are outlined in the BPS's (2021) 'Working with autism: Best practice guidelines for psychologists.' In particular, the perspectives of the Autistic person should be identified, interventions should be strengths-based and provided in a natural and normal context, the social, physical, and sensory environment comfortable to individuals, and psychologists should respect the individuals' goals (BPS, 2021).

2.8.3 Therapy

The therapeutic approaches discussed in the reviewed papers underscore the significance of incorporating neurodiversity-affirmative practices when working with Autistic CYP (Chapman & Botha, 2023; Heselton, 2023; Schuck et al., 2022). Similar to the social validity subtheme within interventions, professionals are advised to become aware of the NP and listen to the voices of the Autistic community to enhance epistemic humility and agency (Chapman & Botha, 2023). It was suggested that therapeutic approaches should ensure agency and incorporate a strengths-based approach (Chapman & Botha, 2023). Interpersonal conflict should be viewed as the relationship between the therapist and the Autistic person rather than holding an individual's Autistic characteristics accountable, which is supported by the Double Empathy Problem (Milton, 2012). As Autistic children experience more adversity than their neurotypical

peers, it is suggested that professionals focus on Autistic identity, childhood adversity and resilience to support mental health needs (Heselton, 2023).

One paper included an adapted group CBT programme for Autistic adolescents who experience depression (Schwartzman et al., 2023). Neurodiversity-affirmative adaptations were made to the programme's treatment engagement, approaches, and delivery, which showed promising improvements in participants' self-esteem, emotional reactivity, and depressive symptoms (Schwartzman et al., 2023). Adaptations included discussing the lived experiences of Autistic individuals, using multiple modalities (e.g., visual, verbal, written), approaches (e.g., large/small group discussions, games, and individual activities), and sensory accommodations to group participants (Schwartzman et al., 2023). These suggestions are included in the NICE guidelines for adapting CBT for Autistic young people who experience anxiety (NICE, 2013). To support Autistic CYP with co-occurring anxiety, the NICE (2013) guidelines recommend adaptations which include incorporating emotion recognition, the use of written and visual information and structured worksheets, offering regular breaks to maintain attention, incorporating the Autistic child's or young person's interests into the therapy sessions where possible, and involving parents in the therapy sessions (NICE, 2013). However, there are currently no NICE guidelines on the adaptations that should be made to CBT for Autistic CYP with co-occurring depression.

2.8.4 Implications for Policy, Practice, and Research

Table 2.9 presents the implications of this scoping review on policy, practice, and research.

Table 2.9

Review Implications for Policy, Practice, and Research

| Implications for Policy and Practice |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Perspective of Autism in Policy</p> <p>Because of the paradigm shifts in relation to the perspectives of autism, policymakers should consider these perspectives in line with the NP. The PSI (2023) has already called for changes to be made in relation to autism assessments and within education, employment, adult diagnosis, and public buildings. These suggested actions include a move away from deficit-based policy (PSI, 2023). This includes calls for updating the deficit-based language of the AON to become more respectful of Autistic individuals' needs in line with the NP (PSI, 2023).</p> |

The PSI also recommends promoting neurodiversity-affirmative language for educational provisions and outlines the need to promote neurodiversity-affirmative approaches to teaching practices (PSI, 2023). Additionally, Autistic led training in all services should be available to educate, inform, and challenge ableist attitudes and create a culture of acceptance (PSI, 2023).

Diagnostic Criteria and Assessment Tools

Due to diagnostic criteria being based on the medical model of disability, this suggests that Autistic characteristics are not as valued as neurotypical individuals due to criteria being based on behaviours and experiences that deviate from the norm (Hartman et al., 2023). Therefore, there is a need to reframe the diagnostic criteria's existing language to ensure Autistic individuals' strengths, preferences, and challenges can be explored (Hartman et al., 2023). Furthermore, as there are no current standardised assessment tools that incorporate neurodiversity-affirmative language available to psychologists (Rutherford & Johnston, 2022), there is a need for new tools to be created that incorporate neurodiversity-affirmative language whilst ensuring an individual's strengths and needs are considered. As the PSI's (2022) 'Professional Practice Guidelines for the Assessment, Formulation, and Diagnosis of Autism in Children and Adolescents' recommend psychologists to apply approaches in line with the NP, further guidance and training is required due to available criteria and tools being based within the medical model. Additionally, further professional development for psychologists is required to align intervention approaches with the NP.

Professional Development and Practices

The three main themes identified in the scoping review of assessment, intervention, and therapy are also three of the main competencies for educational psychologists (EPs) (BPS, 2023; Scottish Executive Education Department [SEED], 2002). The neurodiversity-affirmative suggestions found in the scoping review identify ways in which psychological practices can be adapted when supporting Autistic CYP and their families. Interestingly, collaboration with parents to identify intervention goals also aligns with family-centred practice in children's disability services in Ireland (HSE, 2020). This suggests that neurodiversity-affirmative approaches can be applied in most educational psychological practices. However, due to the limited amount of research carried out on neurodiversity-affirmative approaches, this may have a limited impact on professionals' current practices. As EPs are considered scientist-practitioners (Fallon et al., 2010) and apply evidence-based practices to their work, the limited research available may also impact their confidence in using neurodiversity-affirmative approaches. Because of the different beliefs regarding the NP, this may influence professionals' practices to align with their own beliefs.

Professionals should ensure they have a balanced sense of the NP (Leadbitter et al., 2021). Psychologists may need to reflect on the appropriateness of behavioural interventions to ensure they are naturalistic and support the developmental trajectory of the Autistic child or young person (Leadbitter et al., 2021). Developing and validating neurodiversity-affirmative

assessment tools could support professionals in ensuring interventions are naturalistic and developmentally appropriate for the Autistic child and young person.

Practices that were identified in one theme of the review may also be translated to other aspects of psychologists' work, such as a strengths-based approach and ensuring practices are socially valid. Although this review focused on the application of neurodiversity-affirmative approaches to support Autistic CYP, some approaches discussed in this review may be applied to other individuals who are neurodivergent.

Implications for Research

Examination of Outcomes

This scoping review aimed to explore the available literature regarding neurodiversity-affirmative approaches that are suggested to be used by professionals to support Autistic CYP. Further research should investigate families' experience of assessment approaches that are embedded in the NP. As most of the papers included were review papers, there is still little known about the effectiveness of neurodiversity-affirmative approaches. Therefore, research should investigate the effectiveness of naturalistic and developmental interventions and strengths- and needs-based approaches in improving the QoL, autonomy, and well-being of Autistic CYP.

Educational Psychology Practice

No included papers in this review focused on applying neurodiversity-affirmative approaches within educational psychology practice. In Ireland, EPs support Autistic CYP within disability services, the school psychology service, and child psychology services (HSE, 2016). Additionally, no included literature was published in an Irish context, despite the PSI guidelines on applying the NP within Irish society (PSI, 2022, 2023). Therefore, future research should focus on the application and outcomes of EPs using a neurodiversity-affirmative approach when supporting Autistic CYP in Ireland within the appropriate services they are supported. Finally, future research examining neurodiversity-affirmative approaches to supporting Autistic individuals should include stakeholders from the Autistic community in participatory and action research to ensure the voices of the Autistic community are heard.

2.8.5 *Limitations of the Review*

This scoping review presented several limitations that are outlined in Table 2.10.

Table 2.10

Limitations of Scoping Review

| Lack of robust evidence in included papers |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. The robustness of the scoping review was examined using guidance from Thomas et al. (2017). Overall, the review's findings seemed consistent and coherent among all the included papers. There were no significant differences in how authors of the included papers viewed the neurodiversity paradigm in the context of supporting Autistic children and young people. However, of the 15 studies reviewed, only three of the included studies were empirical studies (Riccio et al., 2021; Schwartzman et al., 2023; Turowetz et al., 2023). Therefore, the majority of the papers included were review papers, which are prone to bias. Because the focus of the scoping review was on available suggested actions published in the literature, the effectiveness of outcomes within the empirical studies was not appraised. This may impact the amount of bias and the strength and credibility of this scoping review. |
| Lack of grey literature |
| 2. It is recommended that scoping reviews include grey literature to increase researchers' understanding and balance of the available literature and to reduce publication bias. However, limits on the type of sources that were included (Peters et al., 2020) were placed to ensure high-quality peer-reviewed literature was included. |
| Consultation with stakeholders |
| 3. The optional stage, which includes a consultation exercise, was not conducted with stakeholders to offer additional information, meaning, or perspectives to the review. (Arksey & O'Malley, 2005; Levac et al., 2010). |
| Generalisability to the Irish Context |
| 4. There was no literature that included Irish data, as all included publications were based in the UK and North America. This may cause the findings of the scoping review not to be generalisable to educational psychology in an Irish context. |

2.8.6 *Research Questions*

From the findings of this literature review, and due to the lack of educational psychology studies of neurodiversity-affirmative approaches within an Irish context, the PSI's (2022) recommendations of embedding the NP into autism assessments, and due to the strength of the NP as an emerging paradigm, it is timely to investigate how the NP and NM influence educational psychology practice. Therefore, several research questions emerged that would

explore the factors informing educational psychologists' attitudes and current neurodiversity-affirmative practices being applied. Research questions include:

1. What factors influence educational psychologists' attitudes towards the neurodiversity paradigm, the Neurodiversity Movement, and neurodiversity-affirmative approaches?
2. What are the prevailing neurodiversity-affirmative practices used amongst educational psychologists?
3. What factors influence educational psychologists' professional practices?
4. What barriers impede the use of neurodiversity-affirmative practices?

3 Empirical Paper

3.1 Introduction

This research study aimed to explore the factors influencing educational psychologists' (EPs') attitudes and professional practices regarding the neurodiversity paradigm (NP) and the Neurodiversity Movement (NM) while also examining the prevailing neurodiversity-affirmative approaches used by EPs when supporting Autistic children and young people (CYP). Despite the topical nature of neurodiversity in the context of autism, there is a significant gap in the literature on EP's use and outcomes of neurodiversity-affirmative approaches for Autistic CYP. Firstly, this paper briefly introduces the context and rationale for this research. Subsequently, the methodological procedures, research results, and discussion are outlined. Finally, implications for practice, policy, and research are also considered.

3.2 Neurodiversity

Neurodiversity is an umbrella term that considers the unique neuro-cognitive variability of humankind (Singer, n.d.). The NM was initiated by the Autistic community and aimed to alter how the public perceives neurodivergence (Singer, n.d.). It aims to replace deficit-based perceptions of neurodivergent individuals with a more balanced view of their needs and abilities (Singer, n.d.). Although neurodiversity is a topical debate in society, the definition of the NP is complex (Dwyer, 2022). For instance, there are differences in how researchers define neurodiversity regarding the paradigm and movement (Dwyer, 2022). Table 3.1 includes the different definitions of neurodiversity provided by academics.

Table 3.1

Definitions of Neurodiversity

| Author | Definitions |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Singer (1998) | “a politics of Neurological Diversity, or ‘Neurodiversity.’ The ‘Neurologically Different’ represent a new addition to the familiar political categories of class/ gender/race and will augment the insights of the social model of disability” (p. 64). |
| Blume (1998) | “Neurodiversity may be every bit as crucial for the human race as biodiversity is for life in general. Who can say what form of wiring will prove best at any given moment?” |

| | |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Singer (n.d.) | <p>Neurodiversity: “a biological truism that refers to the limitless variability of human nervous systems on the planet, in which no two can ever be exactly alike due to the influence of environmental factors.”</p> <p>Neurodiversity Movement: “Is a continuously evolving public discourse, discussion or debate that aims to improve the status of Neurominorities. Anybody who engages in the discourse, whether they are "For" or "Against" the Movement ARE the Movement.”</p> |
| Walker (2021) | <p>“Neurodiversity is the diversity of human minds, the infinite variation in neurocognitive functioning within our species” (p. 31).</p> <p>“The neurodiversity paradigm is a specific perspective on neurodiversity – a perspective or approach that boils down to these fundamental principles:</p> <ol style="list-style-type: none"> 1) Neurodiversity is a natural and valuable form of human diversity. 2) The idea that there is one “normal” or “healthy” type of brain or mind, or one “right” style of neurocognitive functioning, is a culturally constructed fiction, no more valid (and no more conducive to a healthy society or to the overall well-being of humanity) than the idea that there is one “normal” or “right” ethnicity, gender, or culture. 3) The social dynamics that manifest in regard to neurodiversity are similar to the social dynamics that manifest in regard to other forms of human diversity (e.g., diversity of ethnicity, gender, or culture). These dynamics include the dynamics of social power inequalities, and also the dynamics by which diversity, when embraced, acts as a source of creative potential” (p. 31). <p>“The Neurodiversity Movement is a social justice movement that seeks civil rights, equality, respect, and full societal inclusion for the neurodivergent” (p. 32).</p> |
| Dwyer (2022) interactionist/ecological neurodiversity approach | <ul style="list-style-type: none"> • “Disability is the product of an interaction between the characteristics of a disabled person and the environment around them • Disability can be addressed by reshaping environments and society (e.g., by working to reduce stigma) or by changing an individual (e.g., by teaching them adaptive skills) • Curing or normalizing the disabled person should not be goals • Diversity of minds and brains should be valued and individuals with neurological disabilities should be accepted for who they are” (p. 77). |

The term neurodiversity has been evolving since 1998 (Chapman, 2020; Dwyer, 2022; Singer, n.d.). Interestingly, the first definition of neurodiversity by Judy Singer (1998) is now considered ‘vague’ (Dwyer, 2022). Recently, a group of international autistic scholars has been correcting the misconception that Judy Singer coined and theorised the concept of neurodiversity. They note that the concept of neurological diversity and neurodiversity was collectively developed by autistic advocates (Botha et al., 2024). Chapman (2020) describes the NP as a moving target, as it evolves over time in response to societal and cultural influences, as well as interactions between neurodivergent and neurotypical individuals. According to Chapman, the NP will mean “different things at different times” (Chapman, 2020, p. 219). As the concepts of neurodiversity emerged through societal constructs, it is likely that future improvements in interdependence and social environments for neurodivergent people could make the concept redundant (Stenning & Rosqvist, 2021). Furthermore, the evolution of the term neurodiversity has caused individuals to create their own meanings and definitions of neurodiversity (Chapman, 2020; Dwyer, 2022). Given that the concept of neurodiversity is still relatively new and continues to develop, it is important to approach it with an understanding of its fluidity. Additionally, as this field progresses, continued dialogue and research will be essential to refine these concepts and ensure they accurately reflect the experiences and needs of neurodivergent individuals.

In terms of definitions from an Irish context, AsIAM notes that “Neurodiversity’s core idea is that these neurodevelopmental differences should be recognised and respected as a natural and essential part of human diversity, and that neurodivergent people have the right to be treated as we are” (AsIAM, 2022a). Interestingly, within the Psychological Society of Ireland’s (PSI’s) ‘Professional Practice Guidelines for the Assessment, Formulation, and Diagnosis of Autism in Children and Adolescents’ (PSI, 2022), it is noted that guidelines were based on the NP and social model of disability. However, the PSI did not state a definition of the NP within these guidelines. The PSI offered a definition of the NP in a written submission to the Oireachtas Joint Committee on Autism, which defined the NP as similar to the social model of disability, which focuses on environmental barriers that Autistic individuals experience (PSI, 2023). The Department of Education (DoE, 2022a) references neurodiversity and the NP principles in their ‘Autism Good Practice Guidance for Schools – Supporting Children and Young People,’ which states how individuals have underlying neurological differences. It notes the principles of the NP

as not pathologising differences but having a balanced view which considers individuals' strengths and needs. Finally, the Autism Innovation Strategy Analysis of Initial Public Consultation Submissions outlines the need for society and organisations in Ireland to take a neurodiversity-affirming approach (Department of Children, Equality, Disability, Integration and Youth 2023).

The NP's changing perspectives on autism have influenced autism interventions. Previously, autism interventions tended to be deficit-based and had a normative agenda for Autistic individuals to fit within neurotypical norms (Milton & Moon, 2012). For example, ethical concerns have been raised about applying Applied Behavioural Analysis (ABA) because of its focus on normalising Autistic features (Anderson, 2022). AsIAM, the Irish autism charity, declared that ABA views “autism as a deficit” and makes Autistic individuals “conform to neurotypical norms” (AsIAM, 2022b). As the NP continues to evolve, there is a growing recognition that interventions should be informed by neurodiversity-affirmative principles. Interestingly, the DoE's ‘Autism Good Practice Guidance for Schools – Supporting Children and Young People’ recommendations include behavioural approaches such as ABA, Positive Behaviour Support (PBS) and social skills teaching (DoE, 2022a).

Neurodiversity-affirmative approaches consider Autistic individuals as experts on autism, and their views align with the NP (Gillespie-Lynch et al., 2017). Therefore, it is vital to listen to the Autistic community when considering language and approaches to support. In terms of language, there has been a shift from a person-first (i.e., ‘person with autism’) to an identity-first approach (i.e., ‘Autistic person’) and removing the words ‘disorder’ or ‘condition’ (Bury et al., 2020). Neurodiversity-affirmative approaches also aim to build on Autistic individuals' strengths and support challenges they may experience (Cherewick & Matergia, 2023; Hartman et al., 2023). Dundon (2024) suggests that neurodiversity-affirmative practices should i) presume competence, ii) promote autonomy, iii) respect all communication styles, iv) be informed by neurodivergent voices, v) take a strengths-based approach, vi) honour neurodivergent culture and vii) tailor supports to individual needs. While these recommendations provide a promising framework, further research and validation are needed to assess their effectiveness and ensure they are applied in ways that genuinely support and empower Autistic individuals.

3.3 Context

EPs in Ireland work across different settings to support Autistic CYP. EPs work within disability services, known as Children's Disability Network Teams (CDNTs), the school psychology service, known as the National Educational Psychological Service (NEPS), and child psychology services, which include Primary Care Psychology (PCP) and Child and Adolescent Mental Health Services (CAMHS) (Health Service Executive [HSE], 2016). Psychologists are guided by professional best practice guidelines of the National Institute of Health and Care Excellence (NICE), which includes guidance for autism assessments and intervention approaches that support Autistic CYP (NICE, 2011, 2013). In Ireland, the PSI recently updated its 'Professional Practice Guidelines for the Assessment, Formulation, and Diagnosis of Autism in Children and Adolescents' (PSI, 2022). Both the NICE (2013) and PSI (2022) guidelines suggest that identity-first language of 'Autistic' children and young people be adopted and the terminology of 'symptoms' should be changed to 'features.'

The PSI's guidelines (PSI, 2022) are the only professional guidelines for psychologists in Ireland that mention neurodiversity-affirmative practice when supporting neurodivergent CYP. These guidelines suggest that psychological practice should be based on the NP and the social model of disability. These guidelines also recommend using standardised measures and diagnostic manuals. However, standardised measures and diagnostic manuals use a deficit-based approach. This means there is a discrepancy between the PSI guidelines and the diagnostic manuals and assessment tools psychologists use. Additionally, little empirical evidence examines how and if psychologists use neurodiversity-affirmative approaches in practice. AsIAM has stated that these PSI guidelines "represent a sea change in attitude in assessment since the previous guidelines were published in 2010, towards a more-rights based and neuro-affirmative approach" (AsIAM, 2022a, p. 12).

3.4 Neurodiversity-Affirmative Attitudes and Practices

The evolution of the term neurodiversity may influence society's understanding and attitudes toward the NP, which could influence psychologists' understanding and attitudes. AsIAM has urged efforts to tackle discrimination in relation to societal attitudes and stigma towards autism, neurodiversity, and neurodevelopmental difficulties, as these biases can lead to neurodivergent individuals being excluded from society (AsIAM, 2022a).

Previous research found that the age of an Autistic child or young person can influence how professionals formulate an autism diagnosis (Turowetz et al., 2023). With younger children, these professionals viewed autism as a deficit, whereas with older children, professionals were more likely to view autism as a social-cognitive difference (Turowetz et al., 2023). Professional attitudes may also be a barrier or facilitator when supporting parents during an autism assessment of their child (Makino et al., 2021). Furthermore, Sonuga-Barke and Thapar (2021) reported on the importance of changing neurotypical attitudes and suggested that research should focus on how attitudes impact neurodivergent individuals' lives. Previous research has found that psychotherapists had knowledge about the NM and were also aware of the importance of language use and the consequences of using offensive language (Garrett, 2022). They reported that further knowledge about the NP would help inform their practice (Garrett, 2022).

The scoping review findings in the previous chapter demonstrated recommendations on neurodiversity-affirmative approaches to support Autistic CYP in terms of assessment, intervention, and therapy (see Table 2.8). Recommendations included using a strengths-based approach that considers and accepts Autistic CYP interests and experiences and naturalistic intervention approaches that are socially valid to the Autistic community (Brown et al., 2021; Chapman & Botha, 2023; Cherewick, 2023; Cherewick & Matergia, 2023; Dawson et al., 2022; Fletcher-Watson, 2022; Heselton, 2023; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Ne'eman, 2021; Riccio et al., 2021; Schuck et al., 2022; Schwartzman et al., 2023; Sonuga-Barke & Thapar, 2021; Turowetz et al., 2023). However, there is little empirical evidence on the use and effectiveness of neurodiversity-affirmative practices when supporting Autistic CYP. Additionally, much of the literature relating to practice were review papers which included recommendations based on assessment, intervention, and therapeutic approaches, and cannot be considered evidence-based practices. There is a lack of research exploring neurodiversity-affirmative practices within educational psychology, and none within an Irish context. Therefore, as neurodiversity-affirmative approaches are still in its infancy, more research is required to explore the use and outcomes of neurodiversity-affirmative practices used by psychologists when supporting Autistic CYP. Consequently, this research study aimed to explore the factors influencing EPs' attitudes and practices when supporting Autistic CYP in Ireland.

3.4.1 *Research Questions*

1. What factors influence EPs' attitudes towards the NP, the Neurodiversity Movement, and neurodiversity-affirmative approaches?
2. What are the prevailing neurodiversity-affirmative practices used amongst EPs?
3. What factors influence EPs' use of neurodiversity-affirmative approaches?
What barriers impede the use of neurodiversity-affirmative practices?

3.5 **Methodology**

3.5.1 *Research Paradigm*

Critical realism is a post-positivist social science paradigm associated with Roy Bhasker (1975) and his idea of 'stratified reality.' Critical realism joins ontological realism, which suggests a real-world independent of subjective interpretations and constructions, and epistemological constructivism (Maxwell, 2012).

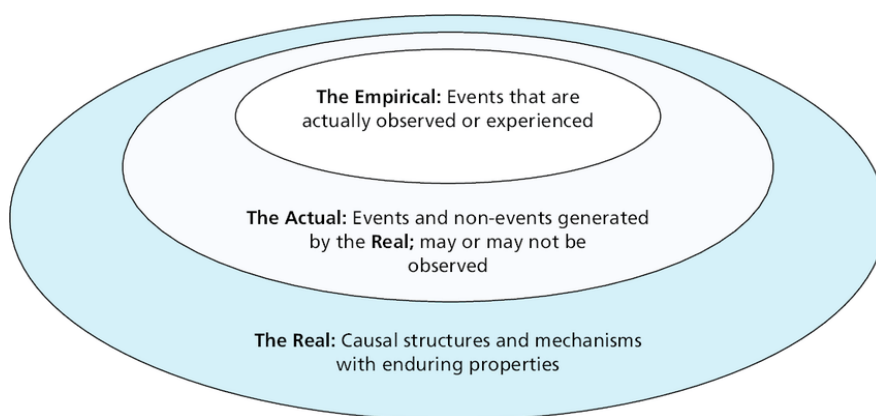
3.5.1.1 Ontology. Critical realists view reality as a "stratified, open system of emergent entities" (O'Mahoney & Vincent, 2014, p. 6). Both physical and mental entities interact to form a single reality (Maxwell, 2012). For instance, the real-world exists independently of subjective interpretation, and this subjective reality can also impact individuals' perceptions and experiences (O'Mahoney & Vincent, 2014). Critical realism believes that unobservable mental states and attributes are also part of the real-world (Maxwell, 2012). Therefore, "the meanings, thoughts, beliefs, emotions, values, and intentions of individuals are neither abstractions from behaviour nor reducible to neurological or other physical phenomena" (Maxwell, 2012, p. 16). Additionally, critical realists claim that the three domains of stratified reality refer to the layered nature of reality, including the empirical, the actual, and the real domains (Haigh et al., 2019) (Figure 3.1). The empirical domain comprises of observable events and experiences within the social world, including views, beliefs, attitudes, and theories (Haigh et al., 2019). The actual domain consists of events and their effects, which causal mechanisms have influenced (Haigh et al., 2019). The real domain represents an unobservable reality that is independent of subjective interpretations, which can cause effects through causal mechanisms (Haigh et al., 2019).

For this research, the empirical domain will explore EPs' surface-level attitudes, professional behaviours, and viewpoints, such as intentions, hopes, concerns, beliefs, and

feelings. The actual domain will explore the underlying structures and mechanisms that influence attitudes towards the NP and neurodiversity-affirmative practices by looking at training opportunities, professional guidelines, and organisational structures. This research will also explore broader unseen causal mechanisms within the real domain, as well as the casual mechanisms of the two theoretical frameworks discussed further.

Figure 3.1

Critical Realist Stratified Ontology (Bhaskar, 1975; Saunders et al., 2009)



3.5.1.2 Epistemology. Critical realism is based on the philosophical standpoint of epistemological relativism (Saunders et al., 2009). Epistemological relativism assumes that knowledge is fallible, partial and can change over time (Albert et al., 2020). For instance, “all beliefs are socially produced, so that all knowledge is transient, and neither truth-values nor criteria of rationality exist outside historical time” (Bhaskar, 1998, pp. 62-63). Critical realism aims to focus on the explanation of mechanisms that lead to events, rather than understanding the social/cultural meanings of events or finding possible predictions (Bhaskar, 1975). For example, critical realist researchers ask, “what must reality be like for this event to have occurred?” (Wynn & Williams, 2012, p. 794) in order to seek causal mechanisms that emerge from physical and social structures which lead to certain events (Sayer, 1992). Critical realism also assumes that some mechanisms may be unobservable (Wynn & Williams, 2012). Therefore, critical realists rely on inferring the existence of observational mechanisms by looking at events they may have

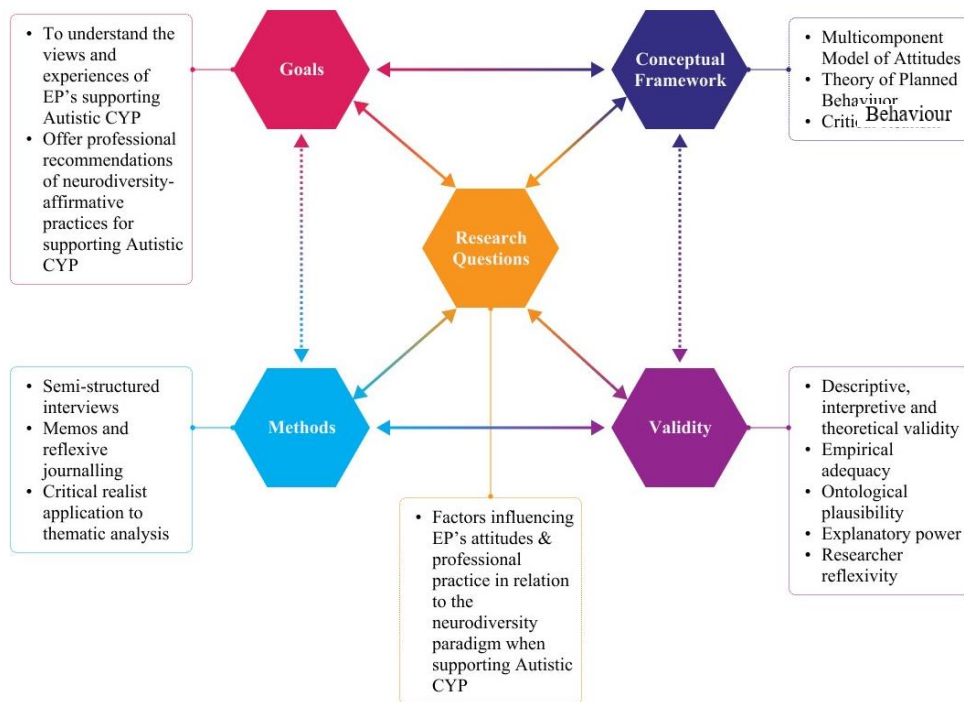
caused (Wynn & Williams, 2012). Finally, critical realism also acknowledges that multiple mechanisms may have caused a particular event to occur (Wynn & Williams, 2012).

3.5.2 Research Design

This study employed a qualitative research design by conducting semi-structured interviews to gain an in-depth understanding of EPs' attitudes and professional practices. Maxwell's (2005) Interactive Model of Research Design was applied to this research study. This model includes five interrelated components (i.e., Goals, research questions [RQs], conceptual framework, methods, and validity) that were considered during the research to ensure coherence (Maxwell, 2005). The 'real' phenomena were represented by the researcher's thoughts within the goals, conceptual framework, and RQs (Maxwell, 2012). The methods component represented actual behaviours and ideas (Maxwell, 2012). Finally, the validity component offered conclusions and inferences found in the actual phenomena (Maxwell, 2012). Figure 3.2 demonstrates how the Interactive Model of Research Design was applied to this study.

Figure 3.2

Application of the Interactive Model of Research Design (Maxwell, 2005)



3.5.3 *Theoretical Frameworks*

Two theoretical frameworks influenced the design of this study, namely, Eagly and Chaiken's (1993, 2007) Multicomponent Model of Attitudes and Ajzen's (1991) Theory of Planned Behaviour (TPB). As this research was aligned with a critical realist perspective, which focuses on causal mechanisms, the causal mechanisms of attitudes and behaviours were explored in relation to EPs attitudes and practices by applying the Multicomponent Model of Attitudes and the TPB.

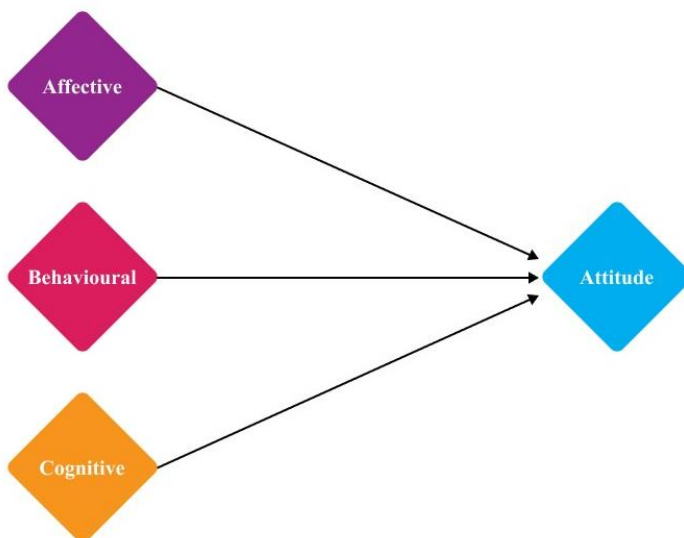
3.5.3.1 Multicomponent Model of Attitudes. Attitudes are “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993, p. 1). This model suggests that attitudes are developed due to affective, behavioural, and cognitive components (Eagly & Chaiken, 2007) (Figure 3.3). The affective component of attitudes is comprised of emotional experiences, feelings, and preferences (Eagly & Chaiken, 2007; Kwon & Vogt, 2010). The affective component influences individuals' attitudes through the arousal of affective reactions from exposure to an attitude object (Haddock & Maio, 2008). Past research has demonstrated that these influences of affective reactions to attitudes are explained through classical conditioning, subliminal priming, and repeated exposure to an attitude object (e.g. Krosnick et al., 1992; Kunst-Wilson & Zajonc, 1980; Murphy & Zajonc, 1993; Zajonc, 1968). The behavioural component comprises of overt actions based on past behaviour due to direct or indirect experiences (Eagly & Chaiken, 1993). This is explained by Bem's (1972) self-perception theory, where observing, reflecting, and interpreting our behaviours influences our attitudes. The cognitive components of attitudes consist of thoughts, perceptions, knowledge, and attributes that influence one's attitudes (Eagly & Chaiken, 1993). For instance, Fishbein & Ajzen's (1975) expectancy-value framework describes how the cognitive component influences attitudes. Expectancy is the belief and subjective probability that a behaviour or action will lead to a particular outcome (Fishbein & Ajzen, 1975). Values are the subjective importance of the resulting outcomes, which can be positive and negative (Fishbein & Ajzen, 1975). Although individuals may have many thoughts or beliefs regarding an attitude object or outcome, only a few beliefs can influence an individual's attitude, which is defined as salient beliefs (Fishbein & Ajzen, 1975). Salient beliefs significantly influence overall attitudes, as these beliefs are considered the most important to individuals (Fishbein & Ajzen, 1975; Haddock & Maio, 2008).

There is also a notable distinction between explicit and implicit attitudes. Explicit attitudes are conscious beliefs in which a person is aware of and can openly identify (Martinussen et al., 2018). In contrast, implicit attitudes are automatic and unconscious attitudes that may not be immediately consciously accessible to an individual (Martinussen et al., 2018). In relation to the Multicomponent Model of Attitudes, implicit attitudes reflect the affective component due to the automatic process that is involved with object-evaluation associations (Fazio, 2007; Gawronski & Bodenhausen, 2007). Explicit attitudes reflect the cognitive component of attitudes due to the reliance on beliefs regarding an attitude object (Gawronski & Bodenhausen, 2007).

As the Multicomponent Model of Attitudes emphasises that attitudes are composed of affective, behavioural, and cognitive components, RQ1 aimed to explore EPs' attitudes towards the NP, NM, and neurodiversity-affirmative approaches. This model was applied to explore EPs' affective responses (emotional reactions), behavioural components (past behaviors and experiences related to these approaches), and cognitive components (beliefs and knowledge).

Figure 3.3

Eagly & Chaiken's (1993, 2007) Multicomponent Model of Attitudes



In relation to this model applied to professional practice, interns were found to have a more positive attitude towards using evidence-based practices, were more likely to use evidence-based practices if they were intuitively appealing and were more likely to adopt new practices

compared to professionals (Aarons, 2004). Both allied health professionals' and educators' attitudes towards evidence-based practice in supporting Autistic clients were found to have moderate levels of support. However, differences were found in that educators had more positive individual attitudes, whereas allied health professionals had more organisational culture support towards evidence-based practice (Paynter et al., 2022). Regarding parents' perspectives, professional attitudes were reported to be a barrier to understanding parental concerns (Makino et al., 2021). Mothers of Autistic children who viewed autism as neurodivergence were found to have lower levels of psychological distress (Ferenc et al., 2023). However, after controlling for caregiver burden, it was found that mothers' attitudes toward autism did not influence their levels of distress (Ferenc et al., 2023). Autistic individuals who adopt a neurodiversity attitude towards autism predicted higher self-esteem, and this also contributed as a protective factor, which suggests professionals need to consider the attitudes of the individuals they are working with (Ferenc et al., 2023).

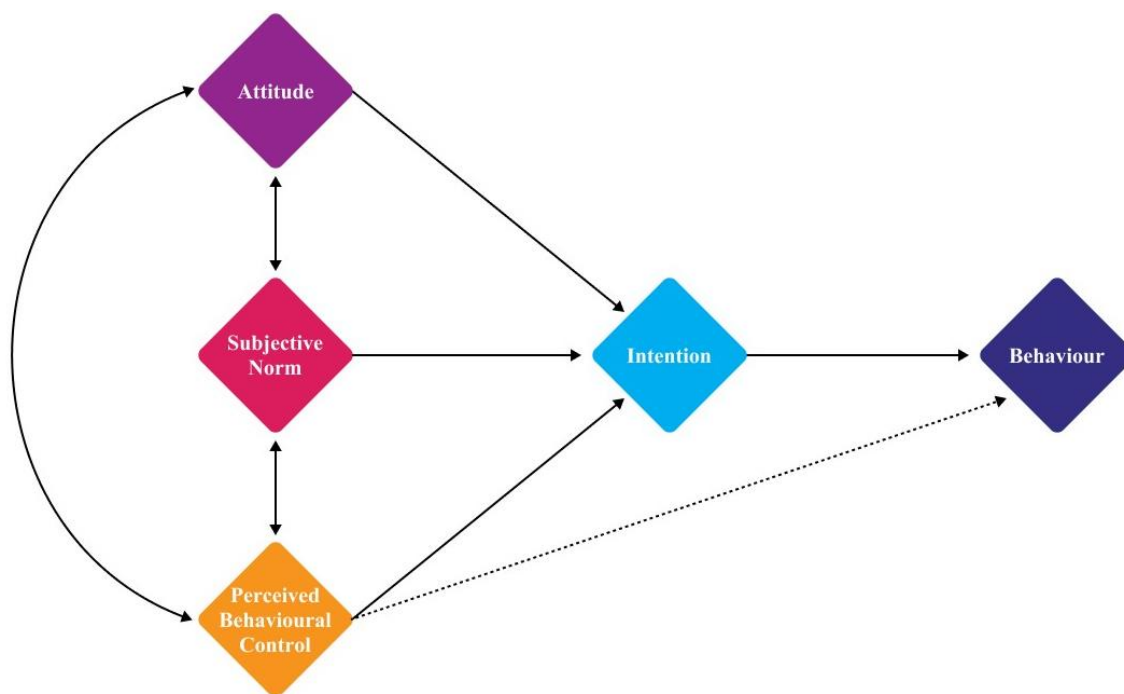
3.5.3.2 Theory of Planned Behaviour (TPB). Ajzen's (1991) TPB is a socio-cognitive behaviour theory that predicts an individual's behaviour, advancing the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). This theory suggests that an individual's attitude, perceived subjective norms, and perceived behavioural control independently determine behavioural intentions, influencing their behaviour (Ajzen, 1991) (Figure 3.4). In this theory, attitudes are favourable or unfavourable appraisals of a particular behaviour (Ajzen, 1991). Subjective norms relate to the social factors of the perception of social pressure of a particular behaviour (Ajzen, 1991). This theory's perceived behavioural control component demonstrates how an individual's perceptions of the ease or difficulty of a behaviour influence the behavioural intentions and the performed behaviour (Ajzen, 1991). This component is similar to Bandura's (1977, 1982) concept of self-efficacy. Self-efficacy "is concerned with judgments of how well one can execute courses of action required to deal with prospective situations" (Bandura, 1982, p. 122). As opposed to Rotter's (1966) concept of locus of control, the perceived behavioural control component varies between contexts rather than remaining constant (Ajzen, 1991).

This theory captures how behavioural intentions, which are determined by attitudes, subjective norms, and perceived behavioural control, influence future behaviour (Ajzen, 1991).

Behavioural intentions include an individual's willingness and motivation to perform a behaviour (Ajzen, 1991). The strength of the behavioural intention also predicts the amount of influence it has over a behaviour (Ajzen, 1991). For instance, the stronger a behavioural intention, the more likely an individual will perform the behaviour. Notably, the behaviour must be under volitional control, where an individual can decide whether or not to carry out the behaviour (Ajzen, 1991). Interestingly, nonmotivational factors can also influence behaviours, such as the availability of necessary opportunities and resources (Ajzen, 1985, 1991).

The TPB has been applied to research on professional development (e.g. Archie et al., 2022; Patterson, 2001) and professional practice (e.g. Archie et al., 2022; Chasteen & Chattergoon, 2020; Kortteisto et al., 2010; Lapkin et al., 2015; Lee et al., 2010; Sadaf & Johnson, 2017; Yan & Sin, 2014). A meta-analytic review of the efficacy of the TPB found reliable patterns regarding the TPB constructs across different settings (Armitage & Conner, 2001). Behavioural intention strongly predicts performed behaviour (Armitage & Conner, 2001). Regarding predictors of behavioural intentions, attitudes were a strong predictor, while perceived behavioural control was a moderate predictor of behavioural intentions and performed behaviours (Armitage & Conner, 2001). Additionally, subjective norms were found to be a weak predictor of behavioural intentions (Armitage & Conner, 2001). However, this may be because of insufficient measurement and the broadening of the normative component (Armitage & Conner, 2001).

RQ3 aimed to explore the factors influencing EPs' use of neurodiversity-affirmative approaches. Applying the TPB, EP's attitudes towards neurodiversity-affirmative practices reflect EPs' favourable or unfavourable evaluations of these approaches. Subjective norms aimed to consider the perceived social pressure or expectations from colleagues, supervisors, and stakeholders regarding the adoption of these practices. Perceived behavioural control aimed to assess EPs' confidence and resources in implementing neurodiversity-affirmative approaches effectively.

Figure 3.4*Ajzen's (1991) Theory of Planned Behaviour*

3.5.4 Interview Schedule Development

Semi-structured interviews can be applied to a realist approach to social investigation by exploring “the interrelationship between theory and method” (Pawson, 1996, p. 299). This approach provides ‘ontological depth,’ considering that “social events are interwoven between various layers of social reality” (Pawson, 1996, p. 300). For example, theory-driven interviewing explores the relationships between causal mechanisms, different contexts, and subsequent outcomes (Smith & Elger, 2014). For this research, the semi-structured interviews will explore the context of how and where EPs came to learn about the NP and the practices of their services, the causal mechanisms of attitudes and structural and organisational influences to explore how they may have an impact on professional practice, and the subsequent outcomes. Additionally, the interviewer actively discovers the interviewee's subjectivity and structural conditions that influence actions (Pawson, 1996). This approach involves going beyond EPs’ surface-level responses to explore their own viewpoints concerning broader systemic influences that shape their experiences. By acknowledging both the EPs’ subjectivity and structural factors, the interviewer can gain deeper insights and enrich the qualitative data.

The semi-structured interview schedule was developed using Kallio's (2016) framework. This framework includes five phases, which follow Lincoln and Guba's (1985) interview principles to guide the development of credibility, confirmability, and dependability. Kallio's (2016) framework allowed the researcher to develop a rigorous interview schedule by following four of the five phases to develop the trustworthiness of the qualitative research (Table 3.2). The final version of the interview schedule used in this study can be found in Appendix E.

Table 3.2

Stages of Interview Schedule Development

| |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Phase 1: Identifying the prerequisites for using a semi-structured interview</p> <p>A semi-structured interview was determined to be appropriate for gathering data on subjective attitudes and professional behaviours for this research.</p> |
| <p>Phase 2: Retrieving and using previous knowledge</p> <p>To gain a comprehensive understanding of the area of the neurodiversity paradigm, the researcher conducted a scoping review of the empirical knowledge that had been recently published to explore areas of gaps within the research. The researcher had previously attended PSI webinars on Adapting to Neurodiversity Affirmative Practice in Child and Adolescent Services and had also completed a professional placement in a CDNT where there was a move towards neurodiversity-affirmative practice.</p> |
| <p>Phase 3: Formulating the preliminary semi-structured interview</p> <p>Interview questions were developed using Eagly and Chaiken's (1993, 2007) Multicomponent Model of Attitudes, Ajzen's (1991) TPB, and gaps in knowledge based on the scoping review. Warm-up, follow-up, and verbal probes were also included to relax participants and direct them to answer the RQ (Kallio et al., 2016). In line with a realist interview, the researcher included statements that incorporated Pawson's (1996) 'teaching-learning' function, where the researcher expresses their theory in order for the participant to make sense of what concepts the interview is applying (e.g., "I'll show you my theory if you show me yours," p. 307). Development of the interview questions also considered Brönnimann's (2022) recommendations for phrasing semi-structured interview schedules using a critical realist paradigm to explore causal mechanisms more easily within an interview.</p> |
| <p>Phase 4: Pilot testing the interview guide</p> <p>Three stages of pilot testing were conducted, where questions were reformulated to enhance the integrity of the research (Kallio et al., 2016). Firstly, the research supervisor and a critical friend (also completing the doctorate in educational and child psychology), completed internal testing. This stage included reading and reviewing the interview schedule to ensure the questions answered the RQ, the questions were clear, and in an appropriate order (Kallio et al.,</p> |

2016). The research recommends the participation of Autistic perspectives when carrying out research regarding Autistic individuals (Leadbitter et al., 2021). Consequently, an Autistic psychologist who specialises in neuro-affirmative autism assessments and interventions was invited to review the interview schedule. This external assessment of the interview schedule (Kallio et al., 2016) offered advice on clarifying definitions and wording about neurodiversity and ensuring the questions were appropriate - for example, differences in the definitions of neurodiversity, neurodiversity paradigm, and neurodiversity movement. Finally, field testing of the interview (Kallio et al., 2016) was carried out with two NEPS EPs who met the eligibility criteria to take part in the research. Field testing of the interview schedule involved testing the practicality of the semi-structured interview, refining questions, and testing the technology used (Kallio et al., 2016). No changes to the interview schedule were made after the field testing, as EPs noted that interview questions were clear and understandable. Data collected for field testing was not included in the findings.

3.5.5 Participants

A total of 12 EPs took part in this study. Demographic data was gathered from EPs who took part in the semi-structured interview (Table 3.3). Of the 12 EPs that took part in the semi-structured interview, the majority were female ($n = 11$) and identified as neurotypical ($n = 10$). 83.3% ($n = 8$) of participants' highest level of education was a professional doctorate or PhD. Most EPs were either working as an EP for either 1-5 years ($n = 6$) or between 11-15 years ($n = 5$). The majority of EPs were working in child disability services ($n = 9$), while others were working in educational services ($n = 2$) or in Assessment of Need (AON) Teams ($n = 1$). Half of the EPs ($n = 6$) also reported they were between 1-5 years in their current post. Half of the EPs were also working as basic grade psychologists ($n = 6$). Five EPs were working as senior psychologists, while one was in a principal specialist role.

Table 3.3
Demographic Information of Participants

| Demographics of EPs | <i>N</i> | <i>%</i> |
|-----------------------------------|----------|----------|
| Gender | | |
| Female | 11 | 91.7 |
| Male | 1 | 8.3 |
| Neurology | | |
| Neurodivergent | 2 | 16.7 |
| Neurotypical | 10 | 83.3 |
| Highest level of Education | | |
| Masters | 4 | 33.3 |
| Professional Doctorate/PhD | 8 | 66.6 |
| Years working as an EP | | |
| 1-5 years | 6 | 50 |
| 6-10 years | 1 | 8.3 |
| 11-15 years | 5 | 41.7 |
| Time in Current Post | | |
| Less than 1 year | 1 | 8.3 |
| 1-5 years | 6 | 50 |
| 6-10 years | 3 | 25 |
| 11-15 years | 2 | 16.7 |
| Service Employed in | | |
| CDNT | 9 | 75 |
| NEPS | 2 | 16.7 |
| AON | 1 | 8.3 |
| Current Role | | |
| Basic Grade | 6 | 50 |
| Senior | 5 | 41.7 |
| Principal Specialist | 1 | 8.3 |

3.5.6 *Sampling Strategy*

Purposeful sampling was used to recruit qualified EPs who work with Autistic CYP (0-18 years) in Ireland within CDNTs, PCP, CAMHS, and NEPS, who were eligible to participate in this study on a first-come, first-serve basis. Purposeful sampling is commonly used in qualitative research (Palinkas et al., 2015). This research used purposeful sampling as it is useful in gathering information-rich data from knowledgeable individuals in a particular area (i.e., EPs who support Autistic CYP in Ireland) (Cresswell & Plano Clark, 2011; Patton, 2014). Snowball sampling was also used, which involved asking the recruited participants to inform their colleagues about the study.

3.5.7 *Sample Size*

As this research used a critical realist approach, it was essential to examine the sample size in terms of data saturation. In qualitative research, data saturation relates to the suitability of purposeful sampling adequacy (Morse, 1995; Sandelowski, 1995). A recent systematic review found that 9-17 interviews were required to reach data saturation (Hennink & Kaiser, 2022). Therefore, the researcher aimed to gather participants between this range to achieve data saturation.

3.5.8 *Recruitment of Participants*

EPs were recruited using several methods. The researcher posted e-flyers (Appendix F) to LinkedIn and Twitter. EPs interested in participating in the semi-structured interviews were asked to email the researcher to express their interest. E-flyers and the Participant Information Letter (Appendix G) were also posted on EPNET, a professional educational psychology forum, and the PSI's Division of Educational Psychology was emailed to share the study information. Recruited participants were also asked to share details of the study with their colleagues. The researcher confirmed if the participants met the study's eligibility criteria of being a qualified EP who works with Autistic CYP before the semi-structured interviews were scheduled. Eligible participants were selected on a first-come, first-served basis, and the researcher arranged a suitable interview date and time. Participants were emailed the Informed Consent Form (Appendix H) before taking part in the interview to make them aware of the process of anonymity and confidentiality.

3.5.9 Data Collection

Semi-structured interviews were conducted between 5 September to 11 October 2023 on Microsoft Teams. At the beginning of the interviews, the researcher assigned an ID number to the participants to ensure anonymity and reminded them of their right to withdraw at any time, up until transcripts were anonymised. This research study did not collect any identifiable data about the research participants, and the participants were reminded to respect the confidentiality of their clients and the service and were asked to use pseudonyms if describing cases. These interviews were recorded on Microsoft Teams, and recordings were saved to a password-protected file on the researcher's laptop. Interviews were transcribed using Microsoft Teams. The researcher verified each transcript by reviewing the audio and transcripts to ensure a high level of accuracy.

3.5.10 Data Analysis

Thematic analysis (TA) was used during qualitative data analysis. Wiltshire & Ronkainen's (2021) realist approach to TA was applied, which explored three themes: experiential, inferential and dispositional, which represent Bhaskar's conception of a 'stratified ontology' (Bhaskar, 1975) (Appendix I). Experiential themes represent individual subjective viewpoints and perspectives and represent the 'empirical' ontological domain of critical realism. Inferential themes are unobserved but occurring events representing the 'actual' domain. Dispositional themes are the causal mechanisms that represent the 'real' domain. Dispositional themes seek to theorise the potential powers necessary for the manifestation of phenomena in the world (Wiltshire & Ronkainen, 2021). Dispositional themes do not always result in real-world events because their causal power depends on the context (Wiltshire & Ronkainen, 2021). The researcher used NVivo 12 software throughout the data analysis stage. The steps of the data analysis are displayed in Table 3.4.

Table 3.4*Steps of Data Analysis (Wiltshire & Ronkainen, 2021)*

| | |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step 1 | Experiential themes were generated by data-driven coding, where the researcher read the first interview transcript and noted tentative ideas about the participant's subjective experiences. After this, 'nascent' themes were identified for the first interview and created as new nodes on NVivo (Appendix J). |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step 2 | The following transcripts (P2, P3 etc.) followed the same steps of data-driven coding for any new experiential themes identified, with the addition of deductively verifying if the nascent experiential themes were found in other participants' transcripts. Quantitative aspects of the themes were considered by exploring the frequency of a theme (i.e., indicating strength) and how many participants noted a specific theme (i.e., indicating prevalence). |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step 3 | Inferential themes were identified based on each experiential theme created in Steps 1 and 2 by re-reading through the transcripts while using inductive and abductive thinking to infer unobserved but occurring experiences and describe the theme in more abstract terms if it added value. |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step 4 | Dispositional themes were then explored from each inferential theme by retroductive thinking to produce causal theories and potential mechanisms that exist within the data being examined, which also considered the causal mechanisms of the two theoretical frameworks applied for this study, the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007) and the TPB (Ajzen, 1991) (Appendix K). Multiple nascent dispositional themes and their supporting evidence from the transcripts were considered before deciding on the main dispositional themes that inferred phenomenon were dependent on. Appendix L shows an example of how dispositional themes were considered. As analysis became more abstract, it is important to recognise that these themes rely on certain theoretical assumptions taken by the researcher, and different themes can emerge from alternative premises (Wiltshire & Ronkainen, 2021). |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

3.5.11 Researcher Reflexivity

“An exploration of the researcher’s underlying worldview and philosophical and theoretical perspectives has considerable importance and recognise the researcher’s assumption and preconceived idea about reality experienced by individuals” (Ide & Beddoe, 2023, p. 7). Critical realism suggests that knowledge production is fallible and subjective (Bhaskar, 2008). This suggests that the researcher becomes part of the research process (Fryer, 2022). Within the critical realist approach used, validity and rigour of the data were gained by researcher reflexivity (Wiltshire & Ronkainen, 2021), as well as considering descriptive, interpretive, and theoretical validity (Maxwell, 1992; Maxwell, 2012) and validity indicators of empirical adequacy, ontological plausibility, and explanatory power (Ronkainen & Wiltshire, 2021) (Table 3.5). Before the interviews were conducted, the researcher wrote a ‘researcher identity memo’ (Maxwell, 2005) and a researcher relationships memo (Maxwell, 2012) to explore the researcher’s background, assumptions, feelings, and values, as well as the potential relationships during the interviews to try to establish mutually productive and equitable relationships with research participants (Maxwell, 2012) (Appendix M). For this research project, the researcher kept a reflective journal where thoughts, feelings, questions, and insights were captured (Fryer, 2022). An excerpt can be found in Appendix N. The researcher also noted any logistical information, observations, and field notes from the interviews (Fryer, 2022; Pillow, 2010).

Table 3.5

Methodological Rigor and Validity in Data Analysis

| | Description | Method Applied |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Descriptive validity | The extent to which the researcher's description aligns with the factual information. | Step 1-Step 2: The researcher coded experiential themes without forcing them into preconceived categories and avoided imposing theoretical frameworks into initial coding. |
| Interpretive validity | The accuracy and appropriateness of the researcher's interpretations of the participants' experiences. | Step 1- Step 3 The researcher re-read the transcripts multiple times to familiarise themselves with the data before interpretation. |
| Theoretical validity | The degree to which a theoretical explanation accurately represents and explains the relationships among variables or concepts. | Step 4: The researcher examined what data would fit into the theoretical frameworks or other theoretical explanations. |

| | | |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Empirical Adequacy | There is sufficient data to support the claims being made. | Step 1-Step 2: The researcher considered the prevalence of a theme by using frequency descriptor, to note how many EPs reported similar themes. Frequency descriptors included ‘most,’ ‘many,’ ‘some,’ and ‘a few’ (see Table 3.7 for explanation). number of EPs that made up themes. |
| Ontological Plausibility | The credibility of the underlying assumptions (i.e., inductive, and abductive claims) which a theory suggests is occurring in the world. | Step 3: The researcher was mindful of what is acutely occurring in the context of EP’s supporting Autistic CYP in Ireland. |
| Explanatory power | A comprehensive account of a phenomenon by explaining its underlying causes, mechanisms, or relationships. | Step 4: The researcher applied this to look at other causal mechanisms that many EPs experience by creating other themes that are not within the theoretical frameworks. |

3.5.12 Ethical Considerations

Mary Immaculate College Research Ethics Committee (MIREC) granted ethical approval for this study in March 2023 prior to beginning data collection (Appendix O). In accordance with the Mary Immaculate College’s (MIC) Record Retention Schedule, anonymised interview transcripts may be held indefinitely or as required by the researcher. The researcher also adhered to the PSI’s (2019) Professional Code of Ethics, which identifies four overall ethical principles: i) respect for the rights and dignity of the person, ii) have competence in their professional skills and ethical awareness, iii) be responsible, trustworthy, and avoid doing harm, and iv) have integrity when completing research.

3.6 Results

The data from the interview transcripts were analysed qualitatively to answer the RQs. The experiential, inferential, and dispositional themes found in the data can be found in Table 3.5 and displayed in Figure 3.6.

Experiential themes within the empirical layer of critical realism were generated first by reading the transcripts and were used as subthemes (Wiltshire & Ronkainen, 2021). Then, inferential themes based on the actual domain were identified on each experiential theme (Wiltshire & Ronkainen, 2021). Finally, dispositional themes, which considered the real layer

and causal mechanisms, were identified for each inferential theme, and were considered as main themes (Wiltshire & Ronkainen, 2021). Suitable dispositional themes were placed on the causal mechanisms of the two theoretical frameworks: the affective, behavioural and cognitive elements of the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007) and the perceived behavioural control and subjective norms mechanisms of the TPB (Ajzen, 1991).

Table 3.6*Experiential, Inferential, and Dispositional Themes*

| Experiential Themes | Inferential Themes | Dispositional Themes |
|--------------------------------------------------|---------------------------|----------------------------------|
| Ethical Concerns about Behavioural Approaches | Emotional Responses | Affective |
| Divisiveness | Exposure | Behavioural |
| Confidence Levels | Knowledge | Cognitive |
| Alignment of Team | Capacity | Perceived behavioural control |
| Learning Experiences | Influence | Subjective Norms |
| Reflection | Hindered | Reliance of the Medical Model |
| Experience of Ineffective Approaches | Constrained | Challenges of Service Provisions |
| Knowledge of the Neurodiversity Paradigm | Frustration | Evolving Landscape |
| Knowledge of the Neurodiversity Movement | | |
| Professional practices | | |
| Autonomy | | |
| Perception of others' views | | |
| Resource Allocation | | |
| Assessment of Need | | |
| Diagnostic Criteria | | |
| Under-resourced Services | | |
| Shifting Perspectives | | |
| Uncertainty | | |

Figure 3.5

Dispositional, Inferential and Experiential Themes in terms of the Critical Realist Paradigm



The results are articulated by incorporating experiential, inferential, and dispositional themes. The researcher employed the sentence structure suggested by Wiltshire and Ronkainen (2021) as a guide to demonstrate the different layers of critical realist reality when presenting the results. As they propose, “In part because of the existence of (dispositional theme), there is a tendency that (inferential theme). This manifested in our data which showed that (experiential theme)” (p. 175). For example, for the affective component (dispositional theme), EPs reported emotional responses (inferential theme) in relation to ethical concerns (experiential theme) regarding more traditional intervention approaches and how they feel the debate around the NP and neurodiversity-affirmative approaches can be divisive.

Additionally, the prevalence of a theme was reported using the frequency descriptors of ‘most,’ ‘many,’ or ‘some’ (Wiltshire & Ronkainen, 2021). The researcher also added ‘a few’ when analysing the interview data (see Table 3.7).

Table 3.7

System Applied to Interview Data

| Frequency Descriptor | Explanation |
|-----------------------------|-------------------------------------------------------------------|
| Most | 10 or more of the 12 interviews contributed to the theme/subtheme |
| Many | 7-9 of the 12 interviews contributed to the theme/subtheme |
| Some | 4-6 of the 12 interviews contributed to the theme/subtheme |
| A few | 1-3 of the 12 interviews contributed to the theme/subtheme |

3.6.1 RQ1: What factors influence EPs' attitudes towards the neurodiversity paradigm, the Neurodiversity Movement, and neurodiversity-affirmative approaches?

The dispositional themes used to answer RQ1 were based on the causal mechanisms of the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007). Therefore, the dispositional themes included exploring the affective, behavioural, and cognitive components that contribute to the formation of attitudes.

3.6.1.1 Affective Component of the Formation of Attitudes. EPs reported emotional responses (inferential theme) in relation to ethical concerns regarding more traditional intervention approaches (experiential theme) and how they feel the debate around the NP and neurodiversity-affirmative approaches can be divisive (experiential theme). Additionally, EPs reflected their levels of confidence in employing neurodiversity-affirmative strategies and the alignment within their team (experiential themes).

3.6.1.1.1 Ethical Concerns about Behavioural Approaches. The data showed that many EPs reported having ethical concerns about some behavioural approaches (i.e., ABA, social skills interventions, PBS, active ignoring, time-out, and monitoring of behaviour). One EP noted that some of these approaches had “unrealistic” expectations of attempting to normalise Autistic features in children (EP 10). Another EP reported that these types of approaches “are likely to not work, or if they do work, they’re likely to induce such anxiety and such fear for the young people going forward, that like we're just putting more need for more intervention down the line” as they may cause “irreparable kind of damage” (EP 4).

EP 3: So, with the kind of neurodiversity piece coming on board, I found that I've moved away from behaviour support plans. I've done very, very few if any, in the last couple of years, I've changed kind of the focus of my plans.

Despite this, some EPs also reported that they still value some elements of more traditional autism support, for example, visuals and those with a strong evidence base (e.g., ABA). For instance, one EP stated, “I still really do firmly believe that we need to have, whether we want to call it a visual schedule or not, but the children know what's coming next” (EP 10).

EP 5: I really feel like [...] it's not black and white, basically. I would really feel like that, we can't just say, OK, this is a new way we're going to do things because everything else

was, the old model and it's wrong, [...], we can't just start from scratch and throw everything away. You know, there's lots of support for existing models.

3.6.1.1.2 *Divisive Nature.* Some EPs reported feeling that the NM has become divisive and quite “polarised” (EP 2). One EP stated that “I think even within psychology, I think there's, you know, very for, very against it, and [...] the people in between like me that are, you know, we're not 100% sure” (EP 2). Another EP described the debate as “a kind of cancel culture” (EP 3), where “you cannot suggest, or, you know, you might have the mite of [named organisation] on you or something like that” (EP 3), while another EP reported that “it has brought up heated debates amongst staff” (EP 9). Because of this divisive nature of the debate, a few EPs reported that they are not comfortable with engaging in the debate either for or against the NM as “it brings up uncomfortable feelings for everyone” (EP 9). Interestingly, a neurodivergent EP noted that the debates “are not neutral debates” for them (EP 6).

EP 6: Being challenged is one thing, but where it crosses that line into an argument, it can kind of cross boundaries between the personal and the professional [...]. And not even the people who are challenging, sometimes it's the silence from other people that's most upsetting for me. [...] there is also a draining element to this debate, and to the fact that it is currently controversial and, that you know, it is constantly posing us challenges in how we work.

3.6.1.1.3 *Confidence Levels.* A few EPs reported feeling noticeably confident at applying neurodiversity-affirmative approaches when supporting Autistic CYP and their families, whilst some EPs felt somewhat confident. For example, one EP reported, “I think I'd have a lot more confidence if there was more out there, more research. But what can you do? It's in its infancy” (EP 3). Additionally, some EPs reported that they do feel confident in offering their professional opinion when creating intervention goals and guiding families to neurodiversity-affirmative goals.

EP 2: You know, a goal might come up around eye contact, and I suppose now, when that comes up, I would talk to the parent about how that wouldn't be an intervention [...]. So certainly, there are certain things that I would, I suppose, be more comfortable in saying “no,” you know, “we won't be changing,” or “we won't be able to change that.”

3.6.1.1.4 Alignment of team. Data showed that some EPs reported that they feel lucky to be working on a progressive team, and a few reported that they feel that neurodiversity-affirmative approaches are “a positive shift in how [they] are thinking about things” (EP 2). EP 9 stated that “I have a very good working relationships with a couple of other professionals as I said, who would be very much wanting to strive towards being more neurodiversity-affirmative. So, I'm very lucky in that sense.”

3.6.1.2 Behavioural Component of the Formation of Attitudes. In part because of the influence past experiences have on individual's attitudes, there was a tendency for EPs who were exposed (inferential theme) to the NP perspective to be more likely to engage in different learning experiences to further inform their knowledge. Additionally, EPs with experience with ineffective approaches were likely to feel disappointment in their failings to support Autistic CYP. This was manifested in the data, which showed how EP's learning experience, engaging in reflective practice, and experiencing different approaches (experiential themes) shaped their attitudes toward the NP and neurodiversity-affirmative practice.

3.6.1.2.1 Learning Experiences. EPs were found to become knowledgeable about the NP through different avenues. For example, by attending continuing professional development on neurodiversity-affirmative approaches ($n = 9$), through social media ($n = 8$), by researching literature ($n = 6$), and through Autistic advocates ($n = 5$). Many EPs also reported that they learned and were influenced about neurodiversity and neurodiversity-affirmative approaches by other psychologists, team members, and supervisors.

3.6.1.2.2 Reflective Practice. Some EPs also reported that they engage in reflection of their approaches, for example, the language used in reports. One EP noted that “It's just other language in the report I try to [...] reflect a bit more [...]. Honestly, I felt like I was being sensitive before but, it made me look at some words” (EP 5).

EP 9: And it's only through practice really, and reflecting on it, I think that we will continue to build on it. And the reflection piece I think is very important too, because in supervision, for example, these conversations may start you know, and then I suppose we're bringing it to a wider kind of forum.

3.6.1.2.3 Experience of Ineffective Approaches. A few EPs also reported having experiences of behavioural and therapeutic interventions being ineffective when supporting Autistic CYP and their families, which may have influenced their attitudes toward these approaches.

EP 3: But what I found over the years was, it was really unrealistic to expect parents to be able to implement this really detailed behaviour support plan, and a lot of the time, I found that when it was a problem at home [...], there was no improvement unless we just got supports into the family. They just needed a break. They needed their home support, they needed their respite, they needed a listening ear.

EP 11: We ran an anxiety workshop for kids with autism. [...] we did all sorts of work with them around like coping skills, a toolbox, relaxation. We brought them in two weeks post, and we asked their parents, and the children retained nothing, absolutely nothing, and the parents were like "didn't see a difference."

3.6.1.3 Cognitive Component of the Formation of Attitudes. The cognitive component demonstrated that there was a tendency for EPs' knowledge (inferential theme) of the NP and NM (experiential theme) to alter their own attitudes and likelihood to engage in neurodiversity-affirmative practices.

3.6.1.3.1 Knowledge of the Neurodiversity Paradigm. This manifested in the data, which showed differences in EPs' knowledge of the NP and NM. All EPs had an understanding of the NP. However, it was noted that EPs reported slightly different beliefs about what the NP represents. For example, most EPs noted that the NP acknowledges the diversity of brain functioning. It embraces the idea that individuals have diverse ways of thinking and experiencing the world, where there is no "normal."

EP 4: Everyone's different, [...] we all have brains and there's a wide range, just like there is of people, of brains and how that results in a different way of thinking or seeing things, or hearing things, and just a different way of understanding kind of how we experience the world.

Additionally, some EPs described the NP as aiming to promote acceptance and inclusivity. They reported that the paradigm accepts and embraces neurological diversity, where different

neurotypes are valued, and individualised needs are also prioritised. For instance, one EP stated that “I think the whole like the premise of neurodiversity is that everyone is different, and all the differences should be embraced and celebrated and supported as they're needed” (EP 1). Some EPs also noted that they believe adopting a strengths-based approach aligns with the NP.

EP 3: For me, the main thing is that move away from it all being bad, deficit, wrong, and dysfunction, disorder, and just that new way of looking at it as just a variation and that there are unique strengths and characteristics.

Many EPs also reported that the NP considers how the environment can impact neurodivergent individuals by “looking at the environmental factors and how the environment itself is impacting, you know, on a neurodivergent individual’s functioning as opposed to looking at within child factors or within individual factors” (EP 9). Many EPs also noted how the environment can either support or disable Autistic individuals. Similarly, a few EPs reported now viewing “autism as either an identity or a disability” (EP 8).

3.6.1.3.2 Knowledge of the Neurodiversity Movement. In terms of thoughts and beliefs regarding the NM, some EPs noted that they do agree with what the movement is trying to achieve and believe “it is very important that we do listen to the voices of neurodivergent individuals, and the importance of them being included in the conversation is definitely, you know, essential” (EP 9). However, most EPs also reported that they think the NM “doesn’t represent all people with autism ” (EP 11), and those with significant support needs can tend to be “forgotten” about (EP 8).

EP 9: [It] doesn't necessarily reflect the level of need of individuals with intellectual disabilities and autism, and I suppose we do recognise as well that their voice may not be fully captured as part of the Neurodiversity Movement, because understandably, many of these individuals will have very significant communication difficulties. So, it’s very tricky I suppose to navigate, but I also think it's also definitely very important you know to recognise its value, but I suppose we do also need to take into consideration other factors.

A neurodivergent EP reported that they do believe the NM does not “overlook challenges” and that it “clearly identifies that [...] you could have very little need in some areas, but you could

have significant need in other areas” (EP 12). Another neurodivergent EP reported that “the internal conversations within the community are not that there is no difficulties. [...]. But it's very important that the audience we share that with will not use that against us” (EP 6).

3.6.2 RQ2: What are the prevailing neurodiversity-affirmative practices used amongst EPs?

This RQ explored the neurodiversity-affirmative practices employed by EPs, revealing shifts in assessment, consultation, and intervention approaches influenced by their attitudes, behaviours, and advocacy from the NM. The RQ only aimed to explore the empirical level and did not explore any causal mechanisms.

3.6.2.1 Professional Practices. Because of the NP and NM, EPs attitudes have adapted which influences their professional practices. This is manifested in the data which shows EPs have adapted assessment, consultation, intervention practices and their language when supporting Autistic CYP and their families.

3.6.2.1.1 Assessment. Some EPs reported that they adopt a neurodiversity-affirmative approach to autism assessments by prioritising transparency, informed consent, and ongoing communication with parents throughout the assessment process, as well as in their feedback and report writing. One EP noted that they have started to “talk to parents the whole way through, so throwing in the word autism from the very beginning, where before it was more of a breaking a diagnosis to somebody” (EP 6). Another EP noted the benefits of ongoing communication throughout as they “find it so much more comfortable with parents that they're kind of like, OK, well, they're thinking they're Autistic now” (EP 4). Concerning cognitive assessments, some EPs expressed concern about the limitations and appropriateness of using cognitive assessments with Autistic CYP. A few EPs reported that they only use cognitive assessments when necessary (e.g., for a school placement: EP 1), because “they do not tap into the ability of Autistic children, they were never designed for them” (EP 2).

Some EPs noted that they deliver assessment feedback by incorporating education about neurodiversity and the NP. For example, EP 12 “shows the spectrum wheel [...] and then below what we have [...] a body shape of like loads of different colours, and that changes in different environments.” Some EPs reported that they offer an empathetic approach when delivering assessment feedback to parents that explains autism through a neurodiversity lens whilst also

acknowledging the Autistic child's or young person's strengths and areas of challenge. One EP reported how their delivery of post-assessment feedback has changed.

EP 6: Like before, [...], your attitude would be expressed in certain automatic ways of setting up the room. Like you would have tissues beside the person, [and ...] you would break this as news. You would prepare everybody for the sadness of that meeting. And your expectation, by your body language, by your voice, by the tissues beside them, was all around, I am now breaking very difficult news. So, I would have carried that attitude into the meeting. Now, [when] I'm talking about [...] these things, it's a bit more gradual.

Some EPs noted concerns about being overly strength-based during feedback sessions with parents, which may diminish some of the areas where an Autistic CYP experiences difficulty. For instance, one EP reported the importance of using a strengths-based approach to feedback while also being conscious of giving a balanced opinion on strengths and needs.

EP 9: not sugar coating it or not, I suppose, coming across as potentially patronising, you know, but I suppose just solely focusing on the individual child's strengths, which they're always are lots of strengths, but it's, I suppose, just balancing it as part of the session. So, it very much does depend on where the parents are at.

EP 2 also reported being concerned about advice about congratulating parents about their child being Autistic.

EP 2: Autism professionals would say "ohh, you know the first thing you should say is congratulations to the parents", [...], and I suppose for me, I think given that I see so many families really struggle, there is a dichotomy there between those two things.

Many EPs reported that they aim to use neurodiversity-affirmative language when writing reports for Autistic CYP. One EP noted that they "would try and be very strength-based in the report, not seeing the challenges as deficits but just more, this is just part of your profile" (EP 8). Additionally, EPs also noted the balance that is required in order to highlight an Autistic child's or young person's strength while also recognising the difficulties that they experience.

EP 4: Parents love that approach, and they find it really lovely to read the report, and it's in no way reducing the difficulties that they have, or the support that they need or are

eligible for [...]. I think it kind of supports nearly that like positive regard or like that attachment and relationship piece as well because it's like, I haven't like given birth to someone who's damaged or who's broken or, who's wrong, and it's not my fault that they're like this, they're just different.

3.6.2.1.2 Consultation. Many EPs reported the importance of the need for adults who are supporting the Autistic child or young person to understand autism, the child's or young person's needs, and ensure they have appropriate expectations for the Autistic CYP. One EP noted that "knowledge is key" (EP 11) when supporting Autistic CYP. This is because a "significant portion of the difficulties that, as a team, we're called in to support young people and families with, sometimes it's just the parents or the teachers just don't understand autism, and don't understand that this is what's appropriate" (EP 1). A few EPs noted the challenge of others having neurotypical expectations of a child. A few EPs also reported they are now incorporating Collaborative and Proactive Solutions (CPS)¹ approaches during consultations with parents to identify a child's or young person's 'lagging skills' and 'unsolved problems.'

Many EPs also reported the importance of building relationships with the family they are working with and using family-centred, collaborative approaches. One EP reported that "I really do follow the family-centred practice, [...] it really is the cornerstone of the CDNT" (EP 3). Some EPs also noted that they consider the parents neurology when supporting them throughout consultations. EP 2 stated that "we do look at recording preferences for how families want to be communicated with."

3.6.2.1.3 Intervention. Most EPs noted how they have shifted their intervention approaches from a traditional, "one-size-fits-all" (EP 1; EP 10) model to a more individualised and holistic-focused approach. For example, some EPs reported that they focus their intervention work on working towards functional and meaningful goals based on the Autistic child's or young person's needs. EP 1 stated, "I'd very much kind of work and see what's going to be functional and meaningful for the young person rather than just what the teacher or the parent wants to see

¹ Collaborative and Proactive Solutions (CPS; Greene & Winkler, 2019) is a collaborative and proactive approach which focuses on the challenges which are causing a behaviour, rather than aiming to modify the problem behaviour itself.

change.” Additionally, some EPs also noted that considering the wellbeing of the Autistic child or young person is also a focus of their work. One EP reported that they “would ask much more about, you know, how are they themselves? [...], Do they like coming to school? Do they feel happy at school?” (EP 7). Some EPs also noted the importance of getting the child’s or young person’s voice to ensure interventions and recommendations are person-centred.

EP 1: I think also including the [...] young person and kind of getting their perspectives as to what the problem is and how we might be able to fix it gives them a much greater sense of autonomy and sense of kind of like agency and ownership, which in terms of the intervention strengthens the intervention and increases the likelihood of it being more successful, but also, [it gives] people a sense of autonomy and agency in their life is massive for their mental health and wellbeing and self-esteem long term, and so letting them feel like they have a say in what's happening in their life is really important.

Additionally, many EPs reported the importance of exploring environmental factors that may contribute to an Autistic child’s or young person’s difficulty and make recommendations about environmental adaptations that would support them.

EP 2: [To] consider the whole child in the whole environment and then say okay, well, if those sensory inputs are inappropriate or they're inadequate, or they're too much, how can we tweak those? And then I'm very much an advocate for, if the child is comfortable and regulated, let's then see what difficulties exist, and then we'll work on those. But if a child is uncomfortable and unregulated, then it's not really fair to expect them to meet whatever expectations you're setting for them.

A few EPs reported they tend to use therapeutic approaches with parents rather than their young children.

EP 4: I think a lot of the time as well, parents have such anxiety [...]. I do find that CBT [‘cognitive behavioural therapy’] approaches for parents are really helpful, within kind of like psychoed and [...] motivational interviewing, [...] having like goals and scales and scaling questions and all those kind of things to kind of support them in that way.

For Autistic young people, some EPs reported that they tend to use person-centred approaches by “doing a lot of like acceptance of autism, which I find I love that piece” (EP 12),

and helping young people explore what it means to be Autistic and advocate for themselves. A few EPs noted that they also offer groups to Autistic young people, such as ‘Being Me².’ A few EPs also reported updating post-diagnostic training for parents to make it more neurodiversity-affirmative.

EP 1: We did a bit of an overhaul of our post diagnostic training. [...]. So, it used to be kind of, it was more medical modelly and very much this is what your child will have difficulties with, and this is what you will have to do to help your child. But we've kind of overhauled it to kind of basically be more neuro-affirmative, and to help parents to better understand what autism is and what autism isn't, and kind of we're hoping that it will help on that sort of acceptance.

3.6.2.1.4 Language. Most EPs reported that they have shifted their language when describing autism. This included using identity-first language (i.e., ‘Autistic person’ rather than ‘person with autism’), no longer using the term ‘ASD,’ and dropping the word ‘disorder.’ For example, EP 1 stated that “we're working as a team to try to move away from ‘ASD’ and just use ‘autism’ instead. We're trying to use phrases like ‘special class’ or ‘autism class’ rather than ‘autism unit.” Additionally, EPs also considered how they describe Autistic characteristics. For example, the terms ‘restrictive,’ ‘abnormalities,’ and ‘disturbance’ that are stated in the Diagnostic and Statistical Manual of Mental Disorders (DSM) and assessment tools.

EP 10: we used to have to write the term ‘emotional disturbance’ in our reports to get resource hours. [...], when I think back that I actually wrote the child presented with emotional disturbance, but that was the language that the NCSE [‘National Council for Special Education’] had in their circulars. [...]. everything was around behaviour and managing challenging behaviours. I just wouldn't dream of putting that into a recommendation now.

One EP reported that they have moved away from the dichotomy of strengths and weaknesses to a more contextual and dynamic understanding.

² Being Me: A group-based programme that supports young people to understand autism using a strength-based approach.

EP 6: I very much moved away from talking about strengths and weaknesses [...]. I believe it's an interaction between the child and environment. So, it's not that the child has a strength or weakness because everything is dynamic and has to be understood in context.”

Some EPs also mentioned how they tend to ‘mirror’ the language used by others and gradually try to reframe it to become more neurodiversity-affirmative.

3.6.3 RQ3: What factors influence EPs' professional practices?

RQ3 explored the factors that influence EPs' professional practices. The influencing factors of subjective norms and perceived behavioural control were used as the causal mechanism (i.e. dispositional themes), in line with Ajzen’s (1991) TPB.

3.6.3.1 Perceived Behavioural Control. Many EPs believed they had the capability and resources (inferential theme) to implement neurodiversity-affirmative approaches in their work. This manifested in the data, which showed that perceived behavioural control influences EPs' autonomy (experiential theme) in their professional practice.

3.6.3.1.1 Autonomy. Many EPs perceived that they have autonomy over their professional practice and can adapt their practices to align with neuro-affirmative principles while also ensuring they are “within professional practice guidelines and ethical guidelines, and a model of service” (EP 8). EPs reported to refer to the following policies and guidelines: the PSI’s (2022) Professional Practice Guidelines for the Assessment, Formulation, and Diagnosis of Autism in Children ($n = 9$), the DSM-5 (American Psychiatric Association [APA], 2013) or the International Classification of Diseases, 11th revision (ICD-11) (World Health Organization [WHO], 2022) ($n = 9$), the Disability Act (2005) and AON (HSE, 2023a) ($n = 4$), the NICE guidelines ($n = 3$), DoE’s Autism Good Practice Guidance for Schools (DoE, 2022) ($n = 3$), family-centred practice (FCP) ($n = 2$), the PSI Code of Professional Ethics (2019) ($n = 1$), Inclusion of Students with Special Educational Needs-Post-Primary Guidelines (Department of Education and Science, 2007) ($n = 1$), the National Policy on Access to Services for Children and

Young People with Disability and Developmental Delay (HSE, 2019) ($n = 1$), and the British Psychological Society's (BPS, 2021) Best Practice Guidelines on Working with Autism ($n = 1$).

3.6.3.2 Subjective Norms. Because of the existence of subjective norms and the expectations that EPs perceive from their social environment, there is a tendency for EPs' actions and practices to be influenced (inferential theme) by what other psychologists and the Autistic community advocate for (experiential theme).

3.6.3.2.1 Perceptions of others' views. Many EPs believe that other psychologists work in ways similar to their own. One EP stated, "I know other psychologists like working in CDNTs like myself would be probably a little bit more, in the middle, [... not] just disregarding old ways of working completely, but tweaking things" (EP 5). Some of these EPs reported that they believe they are more neurodiversity-affirmative than others. This was believed to be due to similar training and level of experience. For example, "I think newly trained, definitely educational psychologist, do work in a neuro-affirmative way, or try their best. But I think it depends hugely on the system that you're working within and the guidelines" (EP 4). A few EPs reported that they perceive other psychologists, especially private practitioners, as more neurodiversity-affirmative than them, as they can be "very neuro-affirmative" (EP 10).

Additionally, all EPs reported that they were hopeful that the Autistic community would embrace their professional practice. However, many EPs' also expressed uncertainty about the extent to which the Autistic community views their current practice, which may not necessarily fully align with neurodiversity-affirmative approaches.

EP 9: I do want to know their perspectives on things, and I do, I recognise that individuals can have different perspectives on things and that's OK and it's valid, you know. [...], but I suppose at the same time, there are certain things that I suppose at a service level, they wouldn't necessarily be in agreement with. [...]. So, in terms of the policies, procedures, you know, in terms of the approaches we're using at a service level, I don't think they would be very happy with some of them, I suppose.

3.6.4 RQ4: What barriers impede the use of neurodiversity-affirmative practices?

Although many EPs are optimistic about applying the neurodiversity-affirmative approach, RQ4 aimed to seek any potential barriers to practicing this way. Three themes that captured systemic

barriers were identified. These included the reliance on the medical model, challenges of service provision, and the evolving landscape of the NP (dispositional themes), which is changing quickly.

3.6.4.1 Reliance of the medical model. Because of the existence of the reliance on the medical model (dispositional theme) that has been historically interlinked within service provision, EPs who wish to use neurodiversity-affirmative approaches may feel hindered (inferential theme) by the resource allocations, Assessment of Need, diagnostic criteria, and working with non-neurodiversity-affirmative colleagues (experiential themes).

3.6.4.1.1 Resource allocation. There is a tendency for EPs attempting to use neurodiversity-affirmative language to feel frustrated with deficit-based resource allocations for Autistic CYP in need of additional support. It was found that many EPs reported that they still must overly focus on an Autistic child's or young person's difficulties in order for them to access educational support ($n = 5$) or to support a family's application for the Domiciliary Care Allowance (DCA) ($n = 4$) or respite ($n = 1$). One EP noted the tension between adopting a strengths-based approach and the need to emphasise challenges:

EP 8: If you don't stress the challenges enough, that can have implications then, you know for maybe families applying for DCA. You know, or maybe specialised educational supports. [...] it's quite a hard balance to reach. You know, you're trying to be strength-based neuro-affirmative, but then [...], that might have a negative implication for more tangible resources. You know, whether that be financial or educational or respite, [...], it's a fine enough balance to meet.

Contrastingly, a few psychologists reported concerns about neurodiversity-affirmative report writing and how they can overly focus on the strengths of an Autistic child or young person, while diminishing the difficulties they face, which then leads them to have difficulty accessing necessary supports and resources.

EP 11: The ultra neuro-affirmative reports, they're not helpful for parents in terms of accessing supports for their child, because all they talk about is strengths, and sometimes it's almost like a diagnosis of autism comes with a surprise at the end because you just read about how fantastic this child is. And then, at the end, there's a diagnosis of autism.

3.6.4.1.2 Assessment of Need (AON³). EPs noted feelings of frustration that they must use deficit-based assessment criteria during AONs. For example, some EPs reported that they believe that the AON process and legislation (e.g., Disability Act, 2005) does not align with neurodiversity-affirmative approaches, as the purpose of the assessment is to examine if a child has a disability.

EP 11: Like when we were doing the summary report, we would have always said that a child with autism meets the criteria for a disability as defined under the Disability Act. So that definition is somebody with a permanent restriction that's going to cause, you know, kind of an inability to participate in society. And that's not true, you know.

3.6.4.1.3 Diagnostic Criteria. Some EPs reported that they still feel obligated to refer to the DSM-5 criteria at the end of an autism assessment report.

EP 9: I suppose we are referencing [Autism Spectrum Disorder] in our autism assessment reports because we do feel that ethically, and you know, kind of legally, [...] that is what we have to do. But I suppose it's not in line then with the neurodiversity-affirmative approach.

A few EPs reported that they are conscious that this may be confusing to families when they apply neurodiversity-affirmative approaches throughout the assessment and then are required to refer to autism as a 'disorder.' Therefore, these EPs reported they caveat this by explaining why this wording was used at the end of reports.

EP 9: But I suppose the DSM-5 criteria in particular is not in any way in neurodiversity-affirmative. It's very much deficit-based. So, I suppose this is where, you know, as clinicians, we're very much conflicted because we are, you know, as part of our practice, we are supposed to be adhering to, you know, that kind of diagnostic criteria in terms of carrying out autism assessments [...] and it then can be confusing for families too.

Because I suppose as part of the assessment, the body of the assessment report, we're

³ Assessment of Need (AON): A statutory process under the Disability Act (2005) where children with a disability have the right to an assessment to assess health and education needs.

using more in neurodiversity affirmative language, and then, you know, we kind of are adding the DSM-5 criteria in as an appendix, so that's probably quite jarring in terms of, you know, for parents to read it. But I suppose we've had the conversations.

3.6.4.2 Challenges in Service Provision. Because of the existence of under-resourced services in Ireland (dispositional theme), where EPs work, there is a tendency for EPs to likely feel disappointed and under pressure (inferential theme) if they cannot deliver a service they would like to offer. These challenges include understaffing and long waiting lists (experiential theme), which does not meet the needs of children and their families in Ireland.

3.6.4.2.1 Under-resourced services. Many EPs reported not having enough time to engage in certain types of work due to the under-resourced services they are working in and the time pressures that they experience. This includes being unable to carry out certain types of interventions ($n = 3$), delivering support and development ($n = 1$), having time to reflect ($n = 2$), engaging in professional development ($n = 2$), and adequately building relationships with the CYP, and their families that they are supporting ($n = 4$).

EP 7: Well, the biggest problem is that we don't get much time to develop a relationship with students with autism. And that's frustrating, because sometimes these kids are crying out for a relationship with somebody, who does understand them and who would communicate all that back to the school. But we don't get enough time to do that really well. And it's one thing I'm uncomfortable [with], cause they can start opening up to you and you kind of feel you get to know them a bit, but then [...] you may not even see them the following year, or for the few years, and you kind of feel, did I raise expectations there that I couldn't meet, that I then disappointed the child do you know what I mean, you know, that is an issue that we just don't get enough time.

3.6.4.3 The Evolving Landscape of Neurodiversity-Affirmative Practices. Due to the evolving landscape of neurodiversity-affirmative practices (dispositional theme), there is a tendency for EPs to feel uncertain (inferential theme) about practicing approaches that have limited evidence or guidance due to their beliefs in the importance of evidence-based practice (experiential theme).

3.6.4.3.1 *Shifting Perspectives.* Due to the evolving landscape of the NM and neurodiversity-affirmative practice, EPs noted that they feel challenged when working with others who still have more traditional views regarding autism and how it should be supported. Some EPs experience other team members having different views. For example, EP 4 mentioned, “I think there is that thing of maybe an older school traditional practice where it is a new thing and they're not familiar with it. They're like, "ohh, that's a bit dangerous cause it's a bit wooly."

EP 10: I feel sometimes people are like you know "what else do you want to ask of us?" You know? "Is this something else we have to do," whereas no, it shouldn't be thought of like that. It's about acknowledging that you know, we can't all as neurotypical, as a neurotypical individual, I suppose, that we can't all expect everyone to think like us and be able to fit into the environments that we're in, without making some accommodations. So, yeah, I think we've a long way to go though.

Additionally, some EPs reported that they have experienced schools not having a good understanding of autism and the NP, which can cause challenges to supporting Autistic CYP people in school.

EP 7: A lot of teachers do not have any specific training in autism or neurodiversity. And then, you know, even at primary level, [...] the amount of time we have to give input and try to give our understanding of why the child's behaving and what they're trying to communicate with their behaviour. They still find it very hard to accept sometimes you know, they still say things like ‘but he's well able to do his work when he wants.’

3.6.4.3.2 *Uncertainty.* Some EPs feel unsure of how to be completely neurodiversity-affirmative in their practices due to the limited amount of evidence-based practice. EP 3 reported that “because if we suddenly say you have to be 100% completely neurodiverse, but we're working off nothing then because there is no evidence base, we don't know what to do there and it's a very slippery slope.”

Additionally, some EPs reported that they found it challenging to stay current because of the constant changes in information on neurodiversity-affirmative approaches.

EP 8: I just feel like it, because it's so rapidly changing, and like there's new terminology most days, like it's like you can feel it's hard to keep up with all the changes and

developments and, almost expectations, I suppose. You know? And then you're worried, like you don't want to insult people or say the wrong thing.

3.7 Discussion

The findings of each RQ will be discussed within the context of previous literature. The study's strengths, limitations, and implications will also be presented.

3.7.1 *RQ1: What factors influence EPs' attitudes towards the neurodiversity paradigm, the Neurodiversity Movement, and neurodiversity-affirmative approaches?*

This RQ aimed to explore EPs' attitudes by examining the causal mechanisms of the formation of attitudes (e.g., affective, behavioural, and cognitive) using the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007). The causal mechanisms of the affective, behavioural, and cognitive components were placed within the 'real' domain of the critical realist paradigm as dispositional themes. The results demonstrated the multifaceted nature of the factors influencing EPs' attitudes towards the NP, NM, and neurodiversity-affirmative approaches, in which degrees of favour and disfavour were reported (Eagly & Chaiken, 1993).

3.7.1.1 Affective. The affective theme explored the emotional responses, feelings, and preferences of EPs (Eagly & Chaiken, 2007; Kwon & Vogt, 2010) that underpinned their implicit attitudes towards the NP, NM, and the use of neurodiversity-affirmative practices (Fazio, 2007; Gawronski & Bodenhausen, 2007). Four subthemes were identified, namely, ethical concerns, divisive nature, confidence levels, and alignment of team. EPs raised ethical concerns about using traditional behavioural approaches, such as ABA, as they aim to make Autistic individuals fit within the neurotypical world (Anderson, 2022; Pellicano & den Houting, 2022; Rutherford & Johnston, 2022). These ethical concerns voiced by EPs are similar to those of AmIAM, Ireland's leading Autism advocacy group. AmIAM (2022b) stated that they oppose the practice of ABA, as they do not believe the principles align with the United Nations Convention on the Rights of Persons with Disabilities (2006).

Questionable or harmful interventions are a common ethical concern to which EPs are frequently exposed to (Franey, 2002). Conflicting guidance concerning intervention approaches may lead to ethical dilemmas. Franey (2002) notes that ethical concerns can be evident where professional practice guidance is inadequate. Interestingly, the DoE's 'Autism Good Practice

Guidance for Schools – Supporting Children and Young People’ suggests behavioural approaches such as ABA, PBS and social skills teaching in their guidelines (DoE, 2022a), which shows a disconnect between the DoE’s recommendations and current advocacy of the Autistic community. It is important to consider, alternative realities which suggest that EPs' ethical stances are also influenced by broader socio-cultural debates and evolving understandings of disability rights within the field.

The divisive nature of different views and opinions regarding the NM caused EPs discomfort in this study. The two arguments of the NM are that it aims for more accepting and inclusive ways to include Autistic individuals and other neurodivergent individuals in society (Baron-Cohen, 2017), whilst the other argument suggests the movement and its language does not represent those with significant support needs (Lutz, 2015; Singer et al., 2023). This conflicting information may have caused EPs to experience cognitive dissonance (Festinger, 1957) as they are confronted with differing views within their professional community, contributing to emotional unease regarding the NM.

Interestingly, EPs that experienced an alignment of the NP and neurodiversity-affirmative approaches within their team experienced this as a positive factor. This suggests EPs’ self-concept, where their identity is affirmed by others who work similarly (i.e., social comparison), and that they may modify their behaviours and beliefs to match their colleagues (i.e., social identification) (Tajfel, 1978). Furthermore, varying levels of confidence in using neurodiversity-affirmative practice emerged from the data, which suggests differences in self-efficacy (Bandura, 1977, 1982). The lack of professional training in relation to neurodiversity-affirmative approaches and resources may undermine EPs’ confidence in applying newer approaches, highlighting the importance of ongoing professional development in enhancing self-efficacy (PSI, 2023).

3.7.1.2 Behavioural. The behavioural component explored overt actions based on past behaviour due to direct or indirect experiences (Eagly & Chaiken, 1993). Learning experiences, such as engaging in continuing professional development (CPD) and reflective practice, were two subthemes that emerged from EPs and contributed to the behavioural components of their attitudes. According to self-determination theory (Ryan & Deci, 2000), engaging in these behaviours may be because EPs were already driven by inherent interest and motivation in

learning about neurodiversity-affirmative approaches to develop their competence. Moreover, interactions with colleagues, team members, supervisors, and supervision contributed to EPs' understanding and acceptance of neurodiversity-affirmative approaches. Additionally, EPs' experience and self-perceptions of ineffective behavioural and therapeutic approaches may have influenced their attitudes (Bem, 1972). Critical realists might argue that these behaviours are not merely individual choices but are embedded within institutional structures and professional norms that define acceptable practice within educational psychology.

3.7.1.3 Cognitive. Knowledge about the NP and NM were the two cognitive components that emerged as influencing EPs' explicit attitudes (Gawronski & Bodenhausen, 2007). The cognitive components explored EPs' thoughts, perceptions, knowledge, and attributes (Eagly & Chaiken, 1993). EPs were found to know about the NP and how it acknowledges diverse brain functioning, celebrates individual differences, and promotes acceptance. Similarly, Walker's (2021) definition of the NP maintains that human diversity is natural and valuable and claims no one 'normal' or 'typical' neurology exists. Some variations in EPs' understanding of the NP were found, and this is understandable given that it is a new concept or due to the varying definitions in the literature (Dwyer, 2022). From a critical realist perspective, these cognitive variations may stem from differing interpretations of professional guidelines and evolving discourses within the field of educational psychology.

Regarding the NM, EPs expressed diverse opinions. Some agreed with its goals, emphasising the importance of the rights and inclusion of neurodivergent individuals (Walker, 2021). However, some EPs expressed that they believed the NM does not fully represent Autistic individuals with significant support needs, such as intellectual disabilities. This is in keeping with the current debates regarding the movement (Lutz, 2015). These cognitive variations indicate that the NP and NM are still developing concepts, and there is a need for more clarity and guidance from professional organizations (Franey, 2002).

3.7.2 RQ2: *What are the prevailing neurodiversity-affirmative practices used amongst EPs?*

This RQ aimed to explore EPs' neurodiversity-affirmative practices when supporting Autistic CYP and their families. As the question aimed to explore actual events that can be observed, data falls within the empirical level of the critical realist paradigm as experiential themes. The majority of the professional practices discussed were found to align with a number of functions of EPs

(Fallon et al., 2010; Scottish Executive Education Department [SEED], 2002). The interviews revealed many neurodiversity-affirmative practices regarding assessment, consultation, intervention, and language use.

Regarding assessment approaches, there is a distinctive shift from traditional approaches towards a more neurodiversity-affirmative approach, as EPs noted the importance of transparency, informed consent, and continuous communication with parents during the assessment process. This approach is in line with the PSI's 'Professional Practice Guidelines for the Assessment, Formulation, and Diagnosis of Autism in Children and Adolescents' (PSI, 2022), as well as published literature regarding the importance of completing autism assessments as a 'process' and becoming familiar with families (Brown et al., 2021; Turowetz et al., 2023). Comparing practices with recommended neurodiversity-affirmative assessment approaches found in the scoping review in the previous paper, EPs did not note how they consider transitions, the Autistic child's or young person's interests, or how they explore social or behavioural differences. The focus of feedback approaches differed for EPs taking part in this study. Some EPs focused on being neurodiversity-affirmative, empathetic, and strengths-based, which aligns with the NP. Some EPs aired concerns about the overly positive, strengths-based feedback, which may undermine the challenges of the Autistic child or young person. Therefore, these EPs noted a preference for a more balanced approach, which considers strengths and areas of need, in line with Singer's (2016) beliefs that the NP sits between the medical and social models of disability. EPs' report writing also echoed this strengths-based and balanced approach in assessment feedback.

EPs highlighted the importance of building adults' knowledge about autism and the strengths and needs of the Autistic child or young person, as well as tailoring expectations during consultations. Building relationships with families and employing family-centred, collaborative approaches which consider family factors such as parents' neurology were emphasised. Consultation approaches EPs use are similar to those suggested in the literature, which suggests approaches which consider ethical considerations and the potential harm of neurotypical expectations (Izuno-Garcia et al., 2023; Ne'eman, 2021; Schuck et al., 2022). As consultation is a core competency of EPs, EPs are well-placed to build relationships and work collaboratively with stakeholders (BPS, 2023; SEED, 2002). Additionally, this collaborative approach used in

consultations may be influenced by the introduction of family-centred practice (FCP) within Progressing Disability Services (PDS) for CYP (HSE, 2019) and the consultative model of service used within NEPS (Government of Ireland, 2024).

EPs reported they are transitioning from traditional, one-size-fits-all intervention models to individualised, holistic approaches, where functional and meaningful goals based on the child's needs and areas for development are prioritised. This is possibly due to the influence of FCP, as the majority of the EPs in this study were based in CDNTs. EPs also noted the importance of considering environmental factors in the first instance, where they provide recommendations for supportive adaptations. This approach is suggested to be the most natural way Autistic CYP can be supported (Sonuga-Barke & Thapar, 2021). Additionally, Leadbitter et al. (2021) also recommend there is a suitable 'goodness of fit' between Autistic children and their environment. Consideration of the child's well-being and involvement of the child's voice in interventions were also found to be standard practices of EPs when they are supporting Autistic CYP. These approaches are considered neurodiversity-affirmative, as they are naturalistic and developmental interventions which support the development of adaptive skills and functional goals whilst also aiming to improve quality of life and Autistic individual's autonomy (Brown et al., 2021; Dawson et al., 2022; Fletcher-Watson, 2022; Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022). EPs did not tend to focus or have time to work with Autistic CYP therapeutically. Where therapeutic support is provided, EPs tend to focus on person-centred approaches which explore Autistic identity. This raises concerns regarding the availability and accessibility of therapeutic support for Autistic CYP in Ireland. Comparing these intervention approaches with the recommendations from the scoping review; EPs did not mention the need for interventions they use to be socially valid with the Autistic community, which is a consideration for future practice.

In terms of language use, EPs noted a shift in language by incorporating identity-first language and moving away from terms that pathologise Autistic features. This shift in language reflects efforts within the field to promote respectful and empowering language when discussing autism. This approach is in line with the Autistic community's preference for identity-first language (Bury et al., 2020), as well as the NICE (2013) and PSI (2022) recommendations on language use.

Overall, while EPs in the study demonstrated some alignment with neurodiversity-affirmative practices, there are areas where their approaches may be considered surface-level compared to the more comprehensive recommendations identified by others. This may be because the current literature is based on recommendations rather than robust empirical studies. From comparing these findings with the recommendations found in the scoping review, EPs did not mention considering the social validity of interventions (Izuno-Garcia et al., 2023; Leadbitter et al., 2021; Schuck et al., 2022) or using and adapting their therapeutic approaches to ensure they are neurodiversity-affirmative (Chapman & Botha, 2023; Heselton, 2023; Schuck et al., 2022; Schwartzman et al., 2023). Therefore, there is a need for further research to explore the effectiveness and impact of neurodiversity-affirmative practices, particularly in the context of educational psychology in Ireland. Caution is warranted in adopting these practices fully until more empirical evidence is available to support their efficacy and relevance.

3.7.3 RQ3: What factors influence EPs' professional practices?

This RQ aimed to explore the causal mechanisms that influence EPs' behavioural intentions by examining perceived behavioural control and subjective norms in terms of the TPB (Ajzen, 1991). These themes lie within the 'real' domain of the critical realist paradigm as dispositional themes. While perceived behavioural control and subjective norms play significant roles in shaping EPs' adoption of neurodiversity-affirmative approaches, a critical realist perspective suggests that these attitudes and behaviours are embedded within larger social structures and professional contexts, which have been highlighted in RQ4. Understanding these complex interactions provides insights into how EPs navigate the evolving landscape of neurodiversity-affirmative practices, highlighting opportunities for further research and professional development within the field.

3.7.3.1 Perceived Behavioural Control. Regarding perceived behavioural control, which predicts behavioural intentions and performed behaviour (Armitage & Conner, 2001), EPs felt they had autonomy and control over their professional practice, which suggests a prominent level of self-efficacy in their abilities to use neurodiversity-affirmative approaches effectively (Bandura, 1977, 1982). This perception, therefore, allows neurodiversity-affirmative EPs to practice in line with the NP whilst also adhering to professional practice guidelines (e.g. PSI's (2022) Professional Practice Guidelines for the Assessment, Formulation, and Diagnosis of

Autism in Children, the DSM-5 (APA, 2013) or ICD-11 (WHO, 2022), the Disability Act (2005) and AON (HSE, 2023a), the NICE guidelines, DoE's Autism Good Practice Guidance for Schools – Supporting Children and Young People (DoE, 2022), family-centred practice, the PSI Code of Professional Ethics (2019), Inclusion of Students with Special Educational Needs-Post-Primary Guidelines (Department of Education and Science, 2007), the National Policy on Access to Services for Children and Young People with Disability and Developmental Delay (HSE, 2019), and the British Psychological Society's (BPS, 2021) Best Practice Guidelines on Working with Autism). As perceived behavioural control can vary depending on context (Ajzen, 1991), EPs' levels of autonomy may have differed depending on what services they are employed in.

3.7.3.2 Subjective Norms. Subjective norms relate to the social factors of the perception of social pressure of a particular behaviour (Ajzen, 1991). EPs' behavioural intentions were impacted by the perceived practices of other psychologists and the expectations of the Autistic community. Some EPs expressed confidence that there was a shared understanding of neurodiversity-affirmative practices within their professional community. Some EPs expressed confidence in their own neurodiversity-affirmative approaches compared to their peers. Others acknowledged colleagues working in private practice as notably more neurodiversity-affirmative.

Additionally, EPs were hopeful that the Autistic community would accept their practices. This subtheme suggests the need for collaboration and dialogue between EPs and the Autistic community to create respectful, inclusive, and responsive approaches to Autistic CYP's needs. These findings suggest that the NP and NM have influenced EP's practices to make their practices more socially desirable to their professional community and broader society (Ried et al., 2022). While subjective norms may play a role in EPs' use of neurodiversity-affirmative approaches, their weak predictive power (Armitage & Conner, 2001) may suggest that other additional factors are likely to contribute significantly to their actual implementation.

3.7.4 RQ4: What barriers impede the use of neurodiversity-affirmative practices?

The RQ aimed to examine the causal barriers hindering EPs from applying neurodiversity-affirmative practices in their work. The main barriers included the reliance on the medical model, challenges in service provision and support, and the continuing evolving landscape of neurodiversity-affirmative approaches.

3.7.4.1 Reliance of Medical Model. EPs encounter significant hurdles in adopting neurodiversity-affirmative practices due to the entrenched nature of the medical model. Regarding service provisions, EPs expressed frustration as some services remain deeply ingrained in the medical model, hindering alignment with neurodiversity-affirmative approaches. Additionally, the deficit-based resource allocation for Autistic CYP and their families is contrary to the values of the NP. EPs reported frustration with how the AON process focused on a child's or young person's deficits and did not focus on a neurodiversity-affirmative approach or use neurodiversity-affirmative language. Similarly, EPs also believed diagnostic criteria such as the DSM-5 causes a disconnect with neurodiversity-affirmative approaches, as it uses a reductionist view which suggests a superiority for neurotypical ways of being (Hartman et al., 2023; Van Dyke & Hovis, 2014). The reliance on the medical model presents a significant obstacle for EPs wishing to adopt neurodiversity-affirmative practices. Continued efforts to make systemic changes for policies and structures to better align with the NP have already been advocated by the PSI (2023).

From an alternative perspective, some stakeholders may argue that the reliance on established medical models ensures consistency and clarity in diagnosis and treatment strategies, thereby maintaining professional standards and equitable resource allocation. This perspective underscores the complexity of balancing strengths-based approaches with the practical realities of accessing necessary supports and services.

3.7.4.2 Challenges in Service Provision and Support. The findings revealed the impact of under-resourced services on the work of EPs in Ireland. The interview data found that EPs are under pressure to support Autistic CYP and their families, emphasising the scarcity of time due to understaffing and lengthy waiting lists. Many EPs expressed frustration over their inability to engage in vital aspects of their work, including interventions, support and development, reflection time, professional development, and building meaningful relationships with children and families. Therefore, EPs may not have enough time to incorporate neurodiversity-affirmative approaches into their work.

However, it is important to consider that these challenges may also reflect broader systemic and structural issues. The allocation of resources might not be optimal, possibly due to systemic inefficiencies or inequities in how funding and support are distributed. Exploring

whether current policies are effectively implemented and if there are gaps in translating policy into practice could provide further insights into these challenges.

In the HSE's 'Roadmap for Service Improvement 2023 – 2026. Disability Services for Children and Young People' (2023b) reported that 16,500 CYP were awaiting their first CDNT appointment as of June 2023. Additionally, challenges in service provision within CDNTs have been strained due to the 20% increase in the demand for AONs and 700 vacant posts. These findings demonstrate the urgent need for the recruitment and retention of EPs and other multi-disciplinary staff to reduce waiting times and meet the needs of Autistic CYP when they require support.

3.7.4.3 The Evolving Landscape of Neurodiversity-Affirmative Practices. Due to the infancy of the NP and the NM, EPs are challenged by the differing perspectives of others in relation to autism. The polarisation between neurodiversity-affirmative perspectives and traditional thinking within broader society posed challenges for EPs collaborating with colleagues and schools. Some EPs experienced resistance or scepticism, highlighting the need for a cultural shift towards embracing the NP within settings that support Autistic CYP.

EPs were found to be uncertain regarding the adoption of neurodiversity-affirmative practices. As EPs are considered scientist-practitioners who rely on using evidence-based practices (Fallon et al., 2010), the little empirical evidence available regarding the use of neurodiversity-affirmative approaches when supporting Autistic CYP presents as another barrier for EPs wishing to apply neurodiversity-affirmative approaches. This uncertainty may also be influenced by EPs' openness to change and willingness to adapt to new approaches. For some EPs, a strong alignment with neurodiversity-affirmative principles might drive their enthusiasm for these practices, whereas others may feel pressured to conform to the popular narrative of neurodiversity, even if they remain sceptical.

Additionally, EPs also reported feeling overwhelmed with the amount of new information as they struggled to stay up to date with the evolving nature of the advocates of the NM. The willingness of EPs to embrace change plays a crucial role in their ability to adapt to these new developments. EPs who are more aligned with neurodiversity-affirmative principles may be more proactive in integrating these practices, whereas those resistant to change might experience greater difficulty in adopting new approaches.

These findings suggest that more professional guidance and resources should be made available for EPs to increase their confidence in applying neurodiversity-affirmative approaches, as well as more research on the outcomes of using these approaches when supporting Autistic CYP. The varying degrees of openness among EPs to neurodiversity-affirmative practices highlight the need for tailored strategies to address resistance and support the gradual integration of these practices into established frameworks.

3.7.5 Conclusions and Implications for Policy, Practice and Future Research

The present research findings demonstrate EPs' multifaceted components, which influence EPs' attitudes towards the NP, the NM, and neurodiversity-affirmative practices by exploring it through the Multicomponent Model of Attitudes (Eagly & Chaiken, 2007). Affectively, ethical concerns regarding the use of behavioural approaches and the divisive nature of the NM were found to affect EPs' attitudes towards the NP and NM. Additionally, EPs' confidence levels and alignment with the team positively influenced EPs' attitudes toward applying neurodiversity-affirmative approaches. Behaviorally, EPs' attitudes were influenced by learning experiences, interactions with colleagues, and reflective practice engagement. Cognitively, knowledge of the NP and NM varied amongst EPs, which suggests the need for clearer definitions within the profession.

Findings also demonstrated the current neurodiversity-affirmative practices in relation to assessment, consultation, intervention, and language use. Perceived behavioural control and subjective norms were identified as factors shaping the professional practices of EPs, affecting both their autonomy in decision-making and the influence exerted by social pressures from colleagues and advocacy efforts within the Autistic community. Despite the absence of empirical evidence, EPs uphold their professional autonomy amidst these influences. While these practices reported by EPs align with the NP, many approaches are surface-level, indicating a greater need for professional development. Barriers that are hindering EPs from applying neurodiversity-affirmative practices include the reliance on the medical model, challenges in service provision and support, and the evolving landscape of neurodiversity-affirmative approaches. In conclusion, this research underscores the need for a robust evidence base in relation to neurodiversity-affirmative practices, ongoing professional development, and systemic changes to better support Autistic CYP.

This research has several strengths and limitations which need to be considered. They are presented in summary form below (Table 3.8) and are explored in detail in the Critical Review Paper. Additionally, findings from this research have implications for policy, EP practice and research. These are briefly outlined in Table 3.9 and will be discussed in detail in the Critical Review paper.

Table 3.8

Strengths and Limitations of the Research

| Strengths | Limitations |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Use of Multicomponent Model of Attitudes and Theory of Planned Behaviour | Using purposeful sampling may cause potential bias, as participants interested or engaged in the neurodiversity paradigm may be overrepresented. |
| Use of a critical realist approach to TA, which aligns with the research paradigm as it considers Bhasker's (1975) layers of 'stratified reality.' | Overrepresentation of EPs from CDNTs. |
| A systematic approach to interview schedule development (Kallio's framework) enhances the reliability and validity of the study. | Reliance on self-report and potential social desirability bias. |
| Recruitment of participants across different services increases the generalisability of findings. | As attitudes continue to evolve, findings may become dated and less applicable over time. |

Table 3.9*Implications for Policy, Practice, and Research*

| Implications for Practice |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. Professional Development: EPs should engage in CPD to increase self-efficacy, confidence, and knowledge in relation to the NP, NM, and neurodiversity-affirmative practices. CDP initiatives should incorporate the voice of the Autistic community to ensure guidance is socially valid and inclusive to Autistic CYP. 2. Psychological Practice: Due to the limited nature of evidence-based neurodiversity-affirmative practices in the literature, EPs wishing to use neurodiversity-affirmative approaches should consider the three pillars of evidence-based practice: i) best evidence, ii) client characteristics, and iii) clinical expertise (Norcross et al., 2008). 3. Ethical Concerns: To address ethical concerns in relation to behavioural approaches, EPs should engage in ethical mindfulness and decision-making (Franey, 2002; Tymchuk, 1986) to ensure psychological practices are supportive and do no harm to Autistic CYP. 4. Professional Guidelines: As there is no clear definition of the NP, the PSI should offer a clear definition for psychologists. Furthermore, intervention guidelines for psychologists to support the use of neurodiversity-affirmative approaches for Autistic CYP should be published. Additionally, the DoE's 'Autism Good Practice Guidelines for Schools' should be reviewed to ensure they promote ethical and inclusive support for Autistic CYP in schools. 5. Changing Attitudes: EPs who experience cognitive dissonance and uncertainty in relation to the NP, NM, and neurodiversity-affirmative practices should engage in different learning experiences and reflective practices which have influenced EPs' attitudes in this study in order to gain more understanding about the NP, NM, and neurodiversity-affirmative practices. |
| Implications for Policy |
| <ol style="list-style-type: none"> 1. Assessment of Need (AON) & Resource allocation: These processes should be re-examined to reduce deficit-based language in order to align better with the NP. 2. Service Provision: To support EPs to better support Autistic CYP, services should aim to reduce waiting times, enhance staff retention, and increase psychology training places to meet the growing demands of Autistic CYP. |
| Implications for Research |
| <ol style="list-style-type: none"> 1. Outcome Evaluation: Research should examine the effectiveness of outcomes of neurodiversity-affirmative approaches when supporting Autistic CYP. This research could also gain a broader range of perspectives on neurodiversity-affirmative approaches, such as different professionals, parents, and Autistic CYP. 2. Inclusion of Autistic voices: Further research should gain neurodivergent individuals' perspectives of approaches used by exploring their experiences and preferences in support requirements. 3. EPs in different services: Further examination is required on how EPs in child psychology services (Child and Adolescent Mental Health Services [CAMHS] and |

Primary Care Psychology [PCP]) incorporate neurodiversity-affirmative approaches when supporting Autistic CYP.

4. **EPs' neurotype:** Research should explore the impact of EPs' neurodivergent or neurotypical status on their attitudes, practices, and rapport with Autistic CYP and their families.
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4 Critical Review and Impact Statement

4.1 Introduction

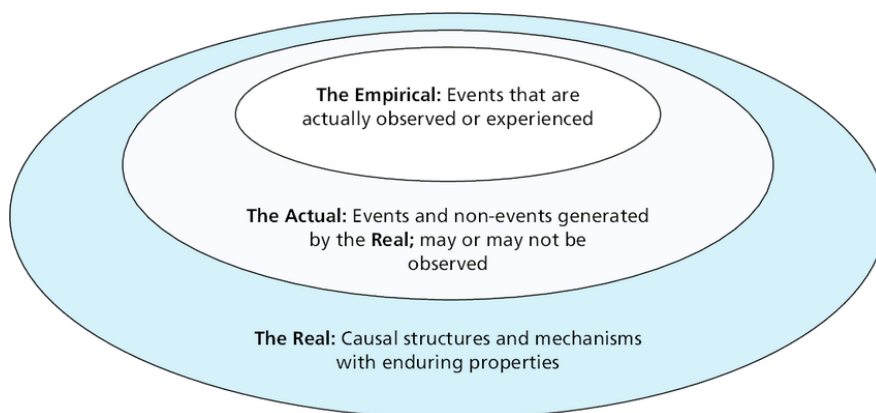
The Critical Review and Impact Statement chapter of this thesis provides a critical analysis on the research and explores the potential implications for educational psychology practice and research. The paper begins with a reflection of the epistemological position and theoretical perspectives that were taken throughout the study. Following this, the rationale of the methodological choices that were made is considered. Strengths, weaknesses, and alternative methods that may have been implemented, as well as a critical appraisal are also discussed. A personal reflection is also included regarding the research process in relation to new learnings and changes in views. The chapter ends with an impact statement that considers the study's findings within academia and in educational psychologists' (EPs') professional practice.

4.2 Epistemological Position

This study employed a critical realist stance (Figure 4.1) to explore the factors influencing EPs' attitudes and practices in relation to the neurodiversity paradigm (NP) and how they implement neurodiversity-affirmative approaches when supporting Autistic children and young people (CYP).

Figure 4.1

Critical Realist Stratified Ontology (Bhaskar, 1975; Saunders et al., 2009)



4.2.1 *Strengths of Critical Realism*

A critical realist approach has been considered most relevant to educational psychology as it can explore EPs' work, values, concepts, and practices that can affect change (Kelly et al., 2017). The researcher explored the three domains of stratified reality within the current study. The empirical domain explored EPs' subjective viewpoints such as intentions, hopes, concerns, beliefs, and feelings, the actual domain sought to explore EPs' unobserved but occurring experiences, and the real domain explored theories about the causal mechanisms that must exist in order to produce attitudes formation and professional practice behaviours (Wiltshire & Ronkainen, 2021).

One strength of the use of a critical realist paradigm for this research study is that it is a transformative paradigm, as it provides a basis for understanding social structures and their impact on various groups, paving the way for social change such as human rights (Botha, 2021; Haigh et al., 2019). As this research aimed to explore factors influencing EPs' attitudes towards the NP and the Neurodiversity Movement (NM) and their use of neurodiversity-affirmative approaches, this study supports Autistic advocates' aim for applying the NP within society. Critical realism also considers 'laminated systems' when exploring the multiple layers of reality, and considering this laminated reality allowed the researcher to explore EPs from different services and obtain their different experiences to get a fuller picture (Bhaskar, 1998; Botha, 2021).

4.2.2 *Limitations of Critical Realism*

The use of a critical realist paradigm is considerably recent, and many disciplines have begun to use this philosophical position (Schiller, 2016). However, there is little guidance on what research methods can be applied (Miller & Tsang, 2011). Regardless of the research paradigm being applied, critical realism relies on robust evidence when creating claims (Coleman, 2019). Additionally, there is little guidance on managing conflicting information in the data (Rolfe, 2006). The researcher experienced this issue, as some EPs reported different views and experiences. Regarding prevalence of a theme, the researcher added the frequency descriptor of 'a few' (e.g., 1-3 EPs), to ensure that multiple viewpoints were considered in the analysis.

4.2.3 *Alternative Research Paradigm*

Social constructivism was also considered a potential research paradigm for this study. This paradigm views reality as socially constructed (Berger & Luckman, 1972), where subjective meanings are explored by considering historical and cultural norms and interactions with others (Creswell, 2013). Social constructivists are interested in exploring individuals' subjective experiences and lived experiences (Creswell, 2013). As this research explored the causal mechanisms of attitude formations and professional practice, as well as the subjective experiences of EPs, a critical realist position was considered more compatible with the current study.

4.3 Theoretical Frameworks

This study aimed to explore factors influencing EPs' attitudes and professional practices. Therefore, this research incorporated two theoretical frameworks: the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007) and the Theory of Planned Behaviour (TPB) (Ajzen, 1991). The strengths and limitations of using these theoretical frameworks will now be discussed, and an alternative framework that may have been used will be explored.

4.3.1 *Strengths of Theoretical Frameworks*

The Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007) and the TPB (Ajzen, 1991) were determined to be most appropriate for this research, as the study was underpinned by the critical realist paradigm and aimed to explore causal mechanisms of attitudes and behaviour formation. For example, the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007) explores the affective, behavioural, and cognitive components which form attitudes. Additionally, attitudes, perceived behavioural control, and subjective norms were seen to be the causal mechanisms of behaviours and their intention (Ajzen, 1991). These theoretical frameworks also allowed the researcher to develop a theory-driven interview schedule, aligning with a critical realist approach (Pawson, 1996; Smith & Elger, 2014).

4.3.2 *Limitations*

In relation to the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007), some critics have argued that the three components of affective, behavioural, and cognitive domains are not empirically distinct from one another (Fishbein & Ajzen, 1975). However, research has shown that the three components of this model are distinct from one another but not

entirely independent (Breckler, 1984; Maio et al., 2018). This study explored the three components as distinct and did not aim to study how the components of the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007) interacted with one another. In regard to the TPB (Ajzen, 1991), which has been applied in many studies, the weakness of the subjective norms of the model raises questions about the framework's validity (Kim et al., 2019). Subjective norms have been found to be a weak predictor of behavioural intention, possibly due to difficulties in measurement and the requirement for enhancing the normative aspect (Armitage & Conner, 2001).

4.3.3 Alternative Theoretical Framework

An alternative theoretical perspective that may have been used for this research study is Bandura's social cognitive theory (Bandura, 1986). This theory views human behaviour as a "triadic, dynamic and reciprocal interaction of personal factors, behavior and the environment" (Al-Mamary et al., 2016, p. 145). Social cognitive theory maintains the idea that behaviour is mediated by response outcomes; it argues that cognitive processes play a role in behaviour (Al-Mamary et al., 2016). For instance, individuals can anticipate the results of their actions before a behaviour is carried out as they can predict the outcomes of this behaviour (Al-Mamary et al., 2016). This theory considers five constructs: reciprocal determinism, behavioural capability, reinforcements, expectations, and self-efficacy (Bandura, 1986). In the context of the factors influencing EPs' attitudes towards the NP, the social cognitive theory could have helped explain how observational learning, social modelling, and cognitive processes contribute to developing their attitudes.

4.4 Methodological strengths and weaknesses

The methodological decisions that were taken concerning the study's design, sampling method, data collection, data analysis, and ethical considerations are discussed below. A critical appraisal of the study's methodology is also explored.

4.4.1 Research Design

This study employed a qualitative research design by conducting semi-structured interviews to gain an in-depth understanding of the factors influencing EPs' attitudes and practices. Qualitative research design aims to explore "persons' lives, lived experiences, behaviours, emotions, and feelings as well as about organisational functioning, social

movements, cultural phenomena, and interactions between nations” (Strauss & Corbin, 1990, p. 11). Using a qualitative research design allowed the researcher to gather in-depth data to better understand the research questions (RQs) by interacting with participants directly (Mwita, 2022). The application of the Interactive Model of Research Design (Maxwell, 2005) (see Figure 3.2) aligned with the critical realist view that views research design as ‘real entities’ (Maxwell, 2012). Maxwell's Interactive Model of Research Design (Maxwell, 2005) acknowledges research plans as real entities, reflecting actual conceptions rather than mere intentions. It fosters an ongoing, adaptive process suited for qualitative research, where designs evolve in response to new information or changing circumstances rather than being prescriptive and linear (Maxwell, 2012).

A mixed-methods approach to data collection may have alternatively been adopted in this study. A mixed-methods approach would have allowed for triangulation of the study's findings and increased external validity (McGrath, 1981), allowing for a reliable analysis of the data in relation to social desirability factors (Ried et al., 2022). An explanatory sequential design (Figure 4.2) may have been applied to answer the RQs. Phase one could have used an online questionnaire to gather quantitative data about EP's use of neurodiversity-affirmative practices. The second phase may have used the findings of phase one to create an interview schedule to gather qualitative data from EPs. This approach was not used because the research aimed to carry out more in-depth explorations of the research questions.

Figure 4.2

Explanatory Sequential Design



4.4.2 Sampling Method

This study used purposeful and snowball sampling to recruit EPs to participate in the semi-structured interviews. The strengths and limitations of the sampling method are presented below.

Purposeful sampling was used to gather information-rich data from knowledgeable individuals in a particular area (i.e., EPs who support Autistic CYP in Ireland) (Cresswell & Plano Clark, 2011; Patton, 2014). Snowball sampling was also used, where recruited EPs were asked to share the study with their colleagues. Twelve EPs took part in the semi-structured interviews.

Using non-randomised purposeful sampling in this study may have decreased potential bias and challenged the generalisability of research findings (Palinkas et al., 2015). For example, there may have been bias in EPs who had volunteered to participate if they were interested in the research area. To minimise this potential bias, the researcher ensured that many perspectives and voices of EPs were conveyed in the analysis of the results. As EPs who worked with Autistic CYP were an inclusion criterion, this may have caused more EPs from Children’s Disability Network Teams (CDNTs) to take part, as their caseloads primarily support Autistic CYP. This may be why no EPs from Primary Care Psychology (PCP) or Child and Adolescent Mental Health Services (CAMHS) expressed interest in participating in the study, as the Models of Service may not include autism assessment.

4.4.3 Data Collection

Semi-structured interviews with 12 EPs were conducted to answer the RQs of this study. The strengths, limitations, and alternative methods of data collection are discussed.

Interviews provide an in-depth understanding of the social world (Brönnimann, 2022), in which “richly textured accounts of events, experiences and underlying conditions or processes” are explored (Smith & Elger, 2014, p. 14). For example, realist interviewing explores the relationships between causal mechanisms, different contexts, and subsequent outcomes (Smith & Elger, 2014). Therefore, semi-structured interviews can be applied to a realist approach to social investigation as this approach provides ‘ontological depth,’ considering that “social events are interwoven between various layers of social reality” (Pawson, 1996, p. 300). The interview

questions were designed to capture causal mechanisms, experiences, and contexts which aligned well with the research paradigm.

A rigorous semi-structured interview schedule was also developed using Kallio's (2016) framework to ensure credibility, confirmability, and dependability (Kallio et al., 2016; Lincoln & Guba, 1985). Pilot testing identified areas for improvement, which ensured questions were clear and well-timed. Additionally, involving an Autistic psychologist for external assessment ensured that the perspectives of Autistic individuals were respected, valued, and considered. Field testing with EPs allowed the researcher to gain confidence in conducting semi-structured interviews, test the technology and timing, and ensured that EPs understood the questions.

The reliance on EPs self-reporting their views, opinions, and experiences to the researcher and the potential impact of social desirability bias (Bergen & Labonté, 2020), can be considered a limitation. This may have influenced EPs to give what they perceive as more socially acceptable responses. For instance, EP's may have agreed with opinions about the NP or the NM, as this perspective has gained more support over the last number of years. The social desirability bias of EPs may have caused an overestimation of socially accepted views while diminishing heterogeneity in responses (Bergen & Labonté, 2020). Strategies such as introducing the study and creating a good rapport with the participants aimed to reduce the risk of social desirability bias (Bergen & Labonté, 2020).

Another limitation of the interview schedule is regarding questions relating to EP's professional practice. Here, questions about assessment, consultation, intervention, and therapy practices tended to presume EPs were utilising neurodiversity-affirmative approaches. During some interviews, EPs either were unaware of or did not use neurodiversity-affirmative practices in these areas. In these instances, the researcher asked general questions about how EPs worked with Autistic children, young people, and their families in each practice area.

As previously discussed, this study may have adopted a mixed-methods approach, using an explanatory sequential design. During the research proposal stage, the researcher considered using the Neurodiversity Attitudes Scale (VanDaalen, 2021), which examines neurodiverse attitudes in relation to autism. It is a 24-item scale that measures three factors on a Likert Scale: Autism Stigma, Autism Identity, and Autism Separability (VanDaalen, 2021). However, the language used in this scale was not considered respectful or consistent with the neurodiversity-

affirmative approach due to several items that used negative stereotypes and misconceptions about autism. For instance, some items suggested that being diagnosed with autism is a tragedy, that Autistic individuals are burdensome to their families, and that autism is an epidemic (VanDaalen, 2021).

4.4.4 Data Analysis

This study applied Wiltshire and Ronkainen's (2021) realist approach to thematic analysis (TA) for analysing the data collected during semi-structured interviews. The strengths and weaknesses of this TA are outlined, as well as alternative approaches that may have been applied.

One of the main strengths of Wiltshire & Ronkainen's (2021) realist approach to TA is that it sits well within the critical realist paradigm that was applied to this study. This TA is grounded in critical realism and explores each layer of Bhasker's (1975) idea of a 'stratified reality' by determining themes. Experiential themes represent the empirical domain, which includes events that are observed or experienced; inferential themes represent the actual domain, which includes events and their effects, which causal mechanisms have influenced; and dispositional themes represent the real domain, which explores causal explanations. Wiltshire & Ronkainen's (2021) realist approach to TA focuses on creating dispositional themes or causal explanations. This TA also acknowledges that qualitative data cannot determine causal conclusions but rather causal explanations similar to coding reliability and reflexive TA (Fryer, 2022; Wiltshire & Ronkainen, 2021). Therefore, this TA meets a research gap as other qualitative analyses are based on the qualitative paradigm (e.g., coding reliability and reflexive TA) (Wiltshire & Ronkainen, 2021). Wiltshire and Ronkainen (2021) have incorporated several validity indicators into their approach, which gives significant consideration to the recognition of validity within realist research (Maxwell, 2012) and strengthens the reliability of the study's findings.

Additionally, incorporating different inference methods at various stages of the analysis (e.g., data-driven, inductive, abductive, retroductive) contributed to the robustness and the rich contextual understanding of the findings. However, as the analysis became more abstract, it is important to recognise that these themes rely on certain theoretical assumptions taken by the researcher, and different themes can emerge from alternative premises (Wiltshire & Ronkainen,

2021). Therefore, the researcher considered multiple nascent themes before agreeing on mature dispositional themes.

As Wiltshire and Ronkainen's (2021) realist approach to TA has been recently proposed, there is limited use of this analysis within peer-reviewed literature compared to Braun and Clarke's (2019) widely used reflexive TA. In applying this realist TA, Wiltshire & Ronkainen used a consensus document between researchers to ensure concepts were not missed and to determine sufficient empirical sufficiency, ontological credibility, and interpretive validity (Wiltshire & Ronkainen, 2021). In this study, the researcher was the sole analyst of the data, which may impact the validity of the findings. Also, the authors of realist TA provided an example of the data coding record and consensus document used in Microsoft Excel. Due to the large amount of transcription and participants, NVivo was used for the analysis. As RQ2 did not focus on exploring causal explanations but on experiences of EPs' practice, the researcher did not determine differential themes for this data in the transcripts. Instead, the researcher only explored experiential themes to answer this RQ, as the theoretical frameworks applied suggested that attitudes, subjective norms, perceived behavioural were causal mechanisms, and had already been explored in other RQs.

Wiltshire and Ronkainen's (2021) realist approach to TA was determined to be the most appropriate way to analyse EPs' transcripts as it fitted well with the critical realist paradigm and the research objectives by exploring the causal mechanisms of the formation of EPs' attitudes and their professional practice. Fryer's (2022) five-step critical realist approach to TA is a similar analysis that may have been applied to this research study. This approach has been suggested to be more accessible compared to Wiltshire & Ronkainen's (2021) realist approach (Fryer, 2022). This model uses subtle differences in the concepts of experiences, events, and causal mechanisms, which may have been easier to understand than the concepts of reality proposed by Wiltshire and Ronkainen (Fryer, 2022). Alternatively, Braun and Clarke's (2019) reflexive TA may also have been used. This approach has been suggested to be appropriate to use for many epistemological positions (e.g., realist, social constructionist, phenomenological, etc.) and has been applied to critical realist research (e.g. Rance et al., 2017). Although reflective TA has been used within a critical realist paradigm to explore participants' empirical world and underlying mechanisms, the overall aim of reflexive TA is to provide 'interpretative stories about

the data' (Braun & Clarke, 2019). However, the reflexive approach to TA is underlined by philosophical constructivism (Fryer, 2022), which does not align with the critical realist paradigm of this study. Critical realism aims to explore the three domains of stratified reality. Therefore, Wiltshire & Ronkainen's (2021) realist approach to TA was applied.

4.4.5 Ethical Considerations

This study was granted ethical approval by the Mary Immaculate Research Ethics Committee (MIREC) in March 2023 (Appendix N). This study also adhered to the Psychological Society of Ireland's (PSI's) Code of Professional Ethics (2019), which identifies four overall ethical principles: i) respect for the rights and dignity of the person, ii) have competence in their professional skills and ethical awareness, iii) be responsible, trustworthy, and avoid doing harm, and iv) have integrity when completing research. Recruited EPs read and signed the Informed Consent Form (Appendix H) before taking part in the interview to make them aware of anonymity, confidentiality, and the interview recording. Before the semi-structured interviews, EPs were also provided with the Participant Information Sheet (Appendix G). At the beginning of each interview, the researcher reminded EPs that participating in the study was voluntary and that they could withdraw at any time if they wished. This research study did not collect identifiable data on EPs. Therefore, EPs were assigned an ID number to ensure anonymity. EPs were also reminded to respect the confidentiality of their clients and the service and were asked to use pseudonyms if describing cases. After the interviews, transcripts were anonymised and stored in an encrypted password-protected file. In accordance with Mary Immaculate College's (MIC's) Record Retention Schedule, anonymised interview transcripts may be held indefinitely or as required by the primary investigator.

4.4.6 Critical Appraisal

The Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Qualitative Research was used to assess the methodological quality of this study by assessing 10 items. Each checklist item about the study is examined below in Table 4.1, and the checklist can be found in Appendix P. Overall, this study demonstrated congruity across all key aspects of the research process, as there was sufficient evidence in all ten domains of the JBI checklist.

Table 4.1*JBI Critical Appraisal for Qualitative Research*

| |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Congruity between the stated philosophical perspective and the research methodology</p> <ul style="list-style-type: none"> In terms of congruity between the stated philosophical perspective and research methodology, this study clearly states the philosophical position of critical realism, and the theoretical perspectives were applied in terms of the application of the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007) and the TPB (Ajzen, 1991). There is congruence between philosophical perspective, theoretical frameworks and the research methodology applied, as causal mechanisms were explored during the interviews, which consider exploring the causal mechanism of the two theoretical frameworks applied and in terms of the two frameworks used as well as other causal theories that emerged, which fits with a critical realist perspective. |
| <p>Congruity between the research methodology and the research question or objectives</p> <ul style="list-style-type: none"> This study aimed to explore four main RQs: i) what factors influence EPs' attitudes towards the neurodiversity paradigm, the Neurodiversity Movement, and neurodiversity-affirmative approaches? ii) What are the prevailing neurodiversity-affirmative practices used amongst EPs? iii) What factors influence EPs' use of neurodiversity-affirmative approaches? and iv) What are the barriers impeding the use of neurodiversity-affirmative practices? Semi-structured interviews were used for an in-depth exploration of EPs' attitudes to the neurodiversity paradigm, their experiences, and practices. The interview schedule was designed to answer the RQs being examined. Therefore, there is evidence of congruity between the research methodology and the RQs of the current study. |
| <p>Congruity between the research methodology and the methods used to collect data</p> <ul style="list-style-type: none"> The qualitative research design applied in this study is congruent with the nature of data collection, as semi-structured interviews were conducted. |
| <p>Congruity between the research methodology and the representation and analysis of data</p> <ul style="list-style-type: none"> As this study pursued a critical realist approach, data analysis aimed to align with this perspective. A critical realist approach to TA explored the three layers of the critical realist paradigm (Wiltshire & Ronkainen, 2021). Prevalence of themes was also incorporated. |
| <p>Congruity between the research methodology and the interpretation of results</p> <ul style="list-style-type: none"> Wiltshire and Ronkainen's (2021) realist approach to TA allowed the researcher to identify themes and subthemes that fit in each layer of critical realism. Each theme (apart from the professional practice theme) fell in the 'real' domain of critical realism, which considers causal mechanisms. In the result section, these causal mechanisms are presented as themes, whilst subthemes are considered within the empirical layer of reality. |

Locating the researcher culturally or theoretically

- The researcher's positionality is declared in the introduction section of this thesis. This included how the researcher gained knowledge about the neurodiversity paradigm and movement, and their own attitudes and beliefs of these perspectives.

Influence of the researcher on the research, and vice-versa, is addressed

- A 'researcher identity memo' (Maxwell, 2005) and a 'researcher relationships memo' (Maxwell, 2012) are included in Appendix M, which were written before data collection regarding the researcher's background, assumptions, feelings, and values, and also the potential relationships during the interviews to try to establish mutually productive and equitable relationships with research participants (Maxwell, 2012). The researcher also reflected on each interview in a reflective journal where thoughts, feelings, questions, and insights were captured (e.g., Appendix N).

Representation of participants and their voices

- The results section included quotations from EPs who were interviewed to ensure their voices were represented in the study by incorporating a range of participant voices. It is important to note that not only were the dominant voices included, but also a variety of perspectives were considered in this study to ensure a comprehensive and well-rounded understanding of the factors influencing EPs' attitudes and practices.

Ethical approval by an appropriate body

- Ethical approval from MIREC is stated in the thesis, and evidence of this is supplied in Appendix O.

Relationship of conclusions to analysis, or interpretation of the data

- The conclusions drawn by the research are based on the data collected through semi-structured interviews, where findings are discussed and interpreted. The study's strengths and limitations are included, as well as implications for practice, research, and policy.
-

4.5 Implications for Practice

In this study, EPs reported using a number of prevailing neurodiversity-affirmative approaches in terms of assessment, consultation, intervention, and language use. However, these approaches may be considered 'surface-level' compared to the recommendations in the scoping review. For example, EPs mainly noted changes to their language, using a strength-based approach and informing families of the NP and NM in consultations. It is important to note that EPs primarily adopted these changes from a limited evidence base. Additional to these neurodiversity-affirmative practices, the scoping review recommendations suggested that professionals should consider the social validity of interventions (Izuno-Garcia et al., 2023;

Leadbitter et al., 2021; Schuck et al., 2022) or using and adapting their therapeutic approaches to ensure they are neurodiversity-affirmative (Chapman & Botha, 2023; Heselton, 2023; Schuck et al., 2022; Schwartzman et al., 2023). As EPs reported varying levels of confidence and self-efficacy (Bandura, 1977, 1982) in applying neurodiversity-affirmative approaches, there is a need for EPs to engage in continuing professional development (CPD) to increase their self-efficacy and knowledge in relation to neurodiversity-affirmative approaches (PSI, 2023). Moreover, CPD initiatives should incorporate the voice of the Autistic community in order to gain their views and opinions on neurodiversity-affirmative approaches to ensure practices are socially valid (Leadbitter et al., 2021).

Due to the evolving landscape of neurodiversity-affirmative practices and the infancy of the NP, EPs voiced uncertainty on how to keep up with the ever-changing opinions and lack of research in relation to neurodiversity-affirmative approaches and their outcomes with Autistic CYP. As EPs are considered scientist-practitioners who rely on evidence-based practices (Fallon et al., 2010), this is a significant barrier for EPs willing to incorporate neurodiversity-affirmative approaches to their practice. Evidence-based practices are “the integration of best available research with clinical expertise in the context of patient characteristics, culture, and preferences” (Norcross et al., 2008, p. 4). Therefore, when applying neurodiversity-affirmative approaches, EPs should consider the three pillars of evidence-based practice, including best evidence, client characteristics, and clinical expertise (Norcross et al., 2008). Furthermore, EPs should maintain a balanced view whilst considering differing opinions and engaging in reflective practice and supervision to ensure well-rounded clinical decisions (Proctor, 1986).

This study found that due to the lack of adequate sources of guidance in relation to questionable behavioural practices (e.g., Applied Behavioural Analysis [ABA]) to support Autistic CYP, EPs reported ethical concerns. To reduce these ethical concerns, EPs can increase their ethical mindfulness by engaging in CPD that incorporates various sources of ethical insights, looking at ethical principles, and using ethical decision-making in their practice (Franey, 2002; Tymchuk, 1986). Additionally, organisations can promote EPs' ethical mindfulness by organising case conferences of live cases that have ethical dilemmas, for EPs to engage in supervision or have an ethical mentor, and for organisations to include ethical mindfulness practices in the induction and initial training of EPs (Franey, 2002). The PSI has

already made efforts to promote the use of neurodiversity-affirmative approaches within autism assessments as their ‘Professional Practice Guidelines for the Assessment, Formulation, and Diagnosis of Autism in Children and Adolescents’ (PSI, 2022) are embedded in the NP. This is considered “a sea change in attitude in assessment [...], towards a more-rights based and neuro-affirmative approach” (AsIAM, 2022a, p. 12). The majority of EPs in this study knew the NP’s core principles. Still, there was some variation in their knowledge regarding the NM and what it advocates for. Therefore, psychology professional bodies such as the PSI should offer EPs a clear definition of the NP and NM and guidance on how to support Autistic CYP through interventions, therapeutically, and through consultations. Furthermore, as the Department of Education’s (DoE’s) ‘Autism Good Practice Guidelines for Schools’ (DoE, 2022) suggest using behavioural approaches, this may hinder EPs and school staff from using the most socially valid and less harmful interventions for Autistic CYP. Therefore, it is recommended that these guidelines be updated in consultation with Autistic advocacy groups in order to best meet the needs of Autistic CYP in schools in Ireland.

The divisive nature of the NM made EPs uncomfortable, which may lead to cognitive dissonance (Festinger, 1957). This professional dissonance may be reduced through changing cognitions/attitude change (Festinger, 1957; McGrath, 2017). From exploring the causal mechanisms of attitudes in relation to the Multicomponent Model of Attitudes (Eagly & Chaiken, 1993, 2007), EPs’ attitudes could further develop through engaging in learning experiences, reflective practice, as well as increasing knowledge in relation to the NP and NM.

4.6 Implications for Policy

A key barrier for EPs applying neurodiversity-affirmative approaches when supporting Autistic CYP was due to the reliance on the medical model within service provision and resource allocation. Regarding the AON process, EPs reported that this was a deficit-based assessment focused on whether a child or young person has a disability. Therefore, there is a need to re-examine the AON process to better align with the NP. Additionally, EPs raised concerns regarding deficit-based language to get support for Autistic CYP. For example, for families to be considered for Domiciliary Care Allowance, a social welfare payment (Department of Social Protection, 2019), the child or young person must have what is considered a ‘severe disability.’

Therefore, service provision and language should incorporate a more strengths-based approach that would reduce stigma and become more inclusive of the needs of Autistic CYP.

This study found that most EPs reported shifting their language when describing autism. This included using identity-first language (i.e., ‘Autistic person’ rather than ‘person with autism’), no longer using the term ‘ASD,’ and dropping the word ‘disorder.’ This approach to language used by EPs is in line with the PSI’s (2022) guidelines, as it recommends using ‘Autism’ or ‘Autistic’ in accordance with the NICE guidelines (2013). Additionally, EPs also shifted from using deficit-based characteristics such as ‘restrictive,’ ‘abnormalities,’ and ‘disturbance’ that are stated in diagnostic criteria. Because of the influence of the NM in advocating for the rights of neurodivergent individuals, the language in the diagnostic criteria may need to be reframed to consider social validity to ensure Autistic individuals’ strengths, preferences, and challenges are explored (Hartman et al., 2023). It is also necessary to develop new measures that integrate terminology that affirms neurodiversity and takes into account an individual's strengths and needs (Rutherford & Johnston, 2022).

Findings from this study further support the PSI’s (2023) recent submission to the Oireachtas Joint Committee on Autism, which has made key recommendations for updating the deficit-based language used in the AON. This includes requests to update the AON's deficit-based language to reflect better the needs of Autistic people to align with the NP (PSI, 2023). Furthermore, the PSI highlights the necessity of promoting neurodiversity-affirmative approaches to teaching practices and suggests that neurodiversity-affirmative language be included in educational provisions, as well as fostering an accepting culture by incorporating autism-led training across services (PSI, 2023). Within the Health Service Executive’s (HSE’s) Roadmap for Service Improvement within CDNTs, actions are outlined to establish AON Hubs, to put in place waiting list initiatives, and to address clinical issues on the guidance of the AON process (HSE, 2023b).

A key finding concerning RQ4 was that the challenges in service provision and support were a main barrier for EPs to carry out neurodiversity-affirmative practices. This leads to EPs feeling under pressure to meet the needs of Autistic CYP and their families due to under-resourced services and long waiting lists. Because of the growing prevalence of autism, which may be accounted for by changes in the diagnostic criteria, and the increased number of females

and adults being diagnosed (Hodges et al., 2020; Russell et al., 2022), this is causing challenges to service provision. These pressures contributed to EPs reporting that they cannot engage with certain types of work or have time to build relationships with children, young people, and their families. An increase in the number of psychologists working in children's services nationally and increasing training places would create better-resourced services that better meet the needs of those who are engaging with them. The HSE's Roadmap actions include ensuring children are referred to the most appropriate service, reducing waiting times, optimising the use of voluntary and private disability service providers, improving outcomes and experience for children and families engaging in CDNT services, optimising service effectiveness and efficiencies, and improve staff retention (HSE, 2023b). This includes creating 20 new clinical trainee psychology placements per annum (HSE, 2023b). Additionally, in 2023, the HSE has engaged in new funding arrangements with trainee EPs. Trainee EPs will now commit to working with the HSE for three years post-qualification (HSE, 2024; MIC, 2023) to improve recruitment and retention of EPs within the HSE.

4.7 Implications for Research

As EPs highlighted the ever-evolving landscape of neurodiversity-affirmative practices and the limited evidence-based, there is a need to evaluate the outcomes of applying these approaches when supporting Autistic CYP and their families. For instance, recommended neurodiversity-affirmative practices found in the scoping review should be evaluated in regard to their effectiveness, and the perspectives of EPs, Autistic CYP, and their families on these approaches should be gathered. Future quantitative evaluation of the use of neurodiversity-affirmative approaches of EPs within an Irish context would provide robust empirical evidence to investigate the frequency of neurodiversity-approaches currently being used.

Evaluation should specifically focus on outcomes related to the quality of life and developmentally appropriate functional skills for Autistic CYP (Leadbitter et al., 2021). Research is also required in creating and validating measures that examine the goodness of fit between an Autistic child or young person and their social, emotional, and physical environment (Leadbitter et al., 2021). This will ensure that the approaches examined are socially valid and accepted by the Autistic community. Further research should also focus on exploring Autistic individuals' strengths, as well as investigating environmental and contextual factors that may

impact their functioning, such as education, peers, family, discrimination, stigma, trauma, and other barriers (Dwyer, 2022). Researchers should also focus on their own attitudes and biases and be aware of the impact of these biases on research findings (Dwyer, 2022). As this researcher identified as neurotypical, future research should include Autistic researchers and consider their opinions and expertise, which may also support the different considerations regarding research findings (Dawson et al., 2022; Dwyer, 2022; Leadbitter et al., 2021).

As the EPs in this study were employed by CDNTs and the National Educational Psychological Service (NEPS), further investigation is warranted in relation to how EPs use neurodiversity-affirmative approaches within child psychology services, such as PCP and CAMHS. Additionally, this study noted whether EPs were neurodivergent or neurotypical without investigating if this has an impact on their attitudes and practices, as well as the rapport they build with Autistic CYP and their families. Therefore, further research may examine this potential influence on neurodivergent or neurotypical EPs' attitudes and practices, which may give more insights into unique strengths, challenges, and strategies neurodivergent EPs have.

4.8 Personal Reflection

Rolfe et al.'s (2001) reflective model allowed the researcher to reflect on the research process (Table 4.2). This model is based on three questions: What? So what? Now what? (Figure 4.3).

Figure 4.3

Rolfe et al.'s (2001) Reflective Model

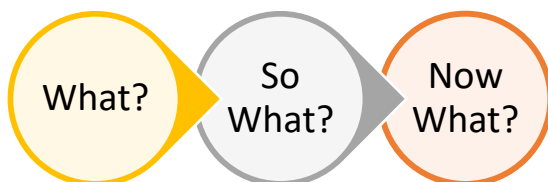


Table 4.2*Rolfe et al.'s (2001) Reflective Model*

| What? |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Throughout my training in the Professional Doctorate in Educational and Child Psychology, my awareness of the NP and NM significantly increased through a combination of lectures, hands-on placement experiences, and active engagement with neurodivergent advocates and neurodiversity-affirmative practitioners on social media platforms. This exposure allowed me to grasp the diverse perspectives and notice the different views held within the psychology community. During my professional placement in disability services, frequent discussions with my supervisors centred around the challenges associated with applying the NP to psychological practice. A notable hurdle identified was the lack of research and guidance on implementing neurodiversity-affirmative practices, an area passionately championed by the neurodivergent community. Intrigued by this gap and committed to contributing to the field, I chose to concentrate my research on exploring factors that influence EPs' attitudes and practices in relation to the NP.</p> |
| So What? |
| <p>Carrying out this research project enabled me to develop my research skills and become a more confident researcher. At the beginning of the course, I would have considered myself as a consumer of research. Now, I can say that I am more confident in carrying out research in the future and becoming a producer of research relevant to educational and child psychology. Before this research project, I had the opportunity to use quantitative approaches. Therefore, this research project enhanced my knowledge about carrying out qualitative research, conducting interviews, utilising NVivo, and carrying out thematic analysis. I found research supervision extremely helpful throughout this process. This allowed me to look at different approaches, think critically, prioritise and create action plans, as well as ensuring the project met the requirements of a doctoral thesis. I learned many different opinions and ways of working while interviewing EPs, which will support me in my own professional practice.</p> <p>The process of changing my original research topic provided me with valuable insights into my working style. I discovered that I thrive under time pressure and excel when I set personal goals and deadlines. Completing this revised topic allowed me to exercise greater control over research decisions and timelines, in contrast to my initial experience with an external agency that operated on its own agenda and timelines.</p> |
| Now What? |
| <p>Engaging with EPs during my research has taught me about diverse neurodiversity-affirmative approaches. Because of this, I will consider integrating these approaches into my professional practice, as I recognise their potential benefits. A critical component moving forward is understanding how the Autistic community perceives and values these approaches that were found in this research. Future initiatives should involve seeking direct feedback from the</p> |

Autistic community to ensure the appropriateness and effectiveness of these practices (Leadbitter et al., 2021). Dissemination of the research findings would allow EPs to develop their professional practice. Beyond individual practice, I recognise the need for a systemic shift in policy and practice. For instance, updating resource allocations, diagnostic criteria, and assessment tools should consider the NP and social model of disability perspective.

After completing the majority of the components of this doctoral thesis, I attended a seminar on ‘Best Practice for the Assessment and Diagnosis of Autism: A review.’ This seminar was hosted by MIC and included input from Professor Somer Bishop (one of the authors of the Autism Diagnostic Observation Schedule, 2nd edition [ADOS-2]) and Professor Eric Fombonne. I learned that one reason for the increased prevalence of autism may be due to the development of better assessment tools in recognising Autistic features. I had the opportunity to ask both speakers about their opinions on the use of neurodiversity-affirmative language during autism assessments and the language in the DSM-5. As there is a current debate around whether autism is an identity or disability, which also came up in some interviews with EPs, I noted the importance of one feature within the diagnostic criteria that made me reflect on this debate. The speakers emphasised that in order to diagnose a person with autism, there must be a significant impact on an individual’s functioning. This made me question whether defining autism as a disability solely based on the criterion of a significant impact on an individual’s functioning captures the full spectrum of their experiences. The speakers also noted that the levels that are included in the DSM-5’s diagnostic criteria for autism are not research-based. Many EPs I interviewed commented that they did not include the levelling system in their reports as the needs of Autistic CYP can change. Taking these insights into account, I anticipate adopting a similar approach in my future profession, recognising the importance of flexibility in addressing the differing needs of Autistic CYP.

By completing this doctoral thesis concerning a relatively new area, I hope to disseminate my research findings in research journals, conferences, and CPD training for EPs.

5 Impact Statement

This thesis aimed to explore the factors influencing educational psychologists' (EPs') attitudes and practices in relation to the neurodiversity paradigm (NP) and Neurodiversity Movement (NM) when supporting Autistic children and young people (CYP) in Ireland.

The literature review addressed the gap in a debatable area, as it provided a synopsis of definitions of neurodiversity, the NP, and the NM, which are not included in any published literature in an Irish context. The review also compiled a list of neurodiversity-affirmative practices that are recommended when supporting Autistic CYP in relation to assessment, intervention, and therapy that EPs can refer to and apply to their practice.

The empirical paper highlighted how EPs have variable understandings regarding the NP and the NM, as well as ethical concerns regarding behavioural approaches. Therefore, this demonstrates the need for clearer definitions and intervention guidance from professional bodies to support this knowledge gap. Additionally, the divisive nature of the debate highlights the need for inclusive dialogue between professionals. Findings demonstrate that EPs learned about the NP, NM, and neurodiversity-affirmative approaches by engaging in learning experiences and reflective practices. Therefore, this shows that continuing professional development in this area may be useful in shifting EPs' attitudes toward neurodiversity and increasing their understanding of this area. However, given that neurodiversity-affirmative approaches continue to develop, and evidence-based practices are limited, this suggests a cautious approach towards implementation is needed.

This research highlighted the range of neurodiversity-affirmative approaches that EPs use in terms of assessment, consultation, intervention, and language, by demonstrating how EPs play a pivotal role in incorporating neurodiversity-affirmative practices when supporting Autistic CYP as they are evolving their practices in line with the NP and Autistic advocacy. Barriers which hinder EPs from using neurodiversity-affirmative practices were also found in this study, which therefore calls for a shift from a deficit-based approach to a more neurodiversity-affirmative and inclusive model and an increase in recruitment and staff retention within services in Ireland.

This research is considered timely as it coincides with some shifts from a deficit-based to a more needs-based approach. It addresses a gap in the research that will support EPs in navigating current and socially valid practices. This research offers a steppingstone for further research on neurodiversity-affirmative approaches, as it demonstrates the need for neurodiversity-affirmative practices to be examined in terms of outcomes through the lens of well-being and quality of life, as well as centering the lived experiences of Autistic individuals.

In terms of disseminating the study findings, the researcher will present findings to MIC Trainee Educational and Child Psychologists during the Research Summer School, which will increase trainee EPs knowledge about the importance of increasing knowledge about the principles of the NP and potential neurodiversity-affirmative approaches. The researcher also aims to publish the literature review and empirical paper in a peer-reviewed journal to share findings with the academic and professional communities. It is hoped that publishing this research will contribute to the ongoing dialogue surrounding neurodiversity-affirmative practices and serve as a resource for psychologists, educators, advocates, and policymakers.

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Appendices

Appendix A: Excluded studies after full-text screening.

| | Reference | Exclusion Code |
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| 1. | Attwood, T. (2020). Working with individuals on the spectrum. In R. Bédard & L. Hecker (Eds.), <i>A spectrum of solutions for clients with autism: Treatment for adolescents and adults</i> . (pp. 3-13). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780429299391-1 | 7 = Book chapter |
| 2. | Bernard, S., Grosjean, B., & Caravallah, L. (2022). Neurodiversity and early autism. <i>JAMA Pediatrics</i> , 176(12), 1272-1273. https://doi.org/10.1001/jamapediatrics.2022.4144 | 4 = Focus is not on recommended practices for Neuro-affirmative practice |
| 3. | Bottema-Beutel, K., Sandbank, M., & Woynaroski, T. (2023). Overview of Issues in Autism Intervention Research: Research Design and Reporting. <i>Perspectives of the ASHA Special Interest Groups</i> , 8(6), 1238–1247. https://doi.org/10.1044/2023_PERSP-23-00104 | 4 = Focus on research practices |
| 4. | British Psychological Society (2022). Neurodiversity is not just for those we work with. <i>Psychologist</i> , 2–5. https://www.bps.org.uk/psychologist/neurodiversity-not-just-those-we-work | 7 = Website article |
| 5. | Carter, K. (2022). When labels are liberating. <i>Therapy Today</i> , 33(2), 38-41. https://www.bacp.co.uk/bacp-journals/therapy-today/2022/march-2022/when-labels-are-liberating/#:~:text=This%20viewpoint%20of%20recognising%20non,it%20doesn't%20define%20them. | 1 = Aimed to provide an overview of neurodiversity principles 4 = Focus on principles of Neurodiversity |
| 6. | Chapman, R. (2020). Defining neurodiversity for research and practice. In H. Bertilsdotter Rosqvist, N. Chown, & A. Stenning (Eds.), <i>Neurodiversity studies: A new critical paradigm</i> . (pp. 218-220). Routledge/Taylor & Francis Group. | 4 = Focus on definition of Neurodiversity |
| 7. | Chapman, R., & Bovell, V. (2022). Neurodiversity, advocacy, anti-therapy. In <i>Handbook of Autism and Pervasive Developmental Disorder: Assessment, Diagnosis, and Treatment</i> (pp. 1519-1536). Springer International Publishing. | 7 = Book Chapter |
| 8. | Choi, S. (2022). <i>Rethinking the Validity of Autism Assessment</i> . University of California, Santa Barbara. | 4 = Focus on validating an assessment tool |

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| 9. | den Houting, J. (2019). Neurodiversity: An insider's perspective. <i>Autism</i> , 23(2), 271-273. https://doi.org/10.1177/1362361318820762 | 4 = Focus on describing the neurodiversity paradigm |
| 10. | Donaldson, A. L., Krejcha, K., & McMillin, A. (2017). A Strengths-Based Approach to Autism: Neurodiversity and Partnering With the Autism Community. <i>Perspectives of the ASHA Special Interest Groups</i> , 2(1), 56-68. https://doi.org/doi:10.1044/persp2.SIG1.56 | 3 = Focus on Speech and Language therapy |
| 11. | Dwyer P. (2022). The Neurodiversity Approach(es): What Are They and What Do They Mean for Researchers?. <i>Human development</i> , 66(2), 73–92. https://doi.org/10.1159/000523723 | 4 = Focus on using neurodiversity approaches in research |
| 12. | Fletcher-Watson, S. (2018). Is early autism intervention compatible with neurodiversity. <i>Development, Autism, Research, Technology</i> . Is early autism intervention compatible with neurodiversity? – DART (ed.ac.uk) | 7 = Blog post |
| 13. | Folostina, R., & Dragomir, A. A. (2022). Autism spectrum disorder and the paradigm of neurodiversity. In C. K. Syriopoulou-Delli & R. Folostina (Eds.), <i>Interventions for improving adaptive behaviors in children with autism spectrum disorders</i> . (pp. 39-51). IGI Global. https://doi.org/10.4018/978-1-7998-8217-6.ch003 | 7 = Not accessible |
| 14. | Gaskill, F. W. (2020). There are other operating systems besides windows: Finding strengths in neurodiversity. In R. Bédard & L. Hecker (Eds.), <i>A spectrum of solutions for clients with autism: Treatment for adolescents and adults</i> . (pp. 277-281). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780429299391-36 | 7 = Book chapter |
| 15. | Goldberg, M. D., & Scott, J. W. (2023). Neurodiversity. <i>Scientific American</i> , 328(4), 6-6. | 4 = Does not focus on supporting autistic children and young people using neurodiversity-affirmative approaches |
| 16. | Grissom, A., Finke, E., & Zane, E. (2023). Verbal fluency and autism: Reframing current data through the lens of monotropism. <i>Autism Research</i> , 17(2), 324–337. https://doi.org/10.1002/aur.3071 | 3 = Focus on speech pathologists practices |

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| 17. Jaysane-Darr, A. (2020). Enabling and disabling emotional diversity: Negotiating autism spectrum disorder in therapeutic encounters. <i>Children & Society</i> , 34(4), 261-275. https://doi.org/10.1111/chso.12374 | 4 = Focus not on applying neuro-affirmative approaches |
| 18. Jones, F., Hamilton, J., & Kargas, N. (2024). Accessibility and affirmation in counselling: An exploration into neurodivergent clients' experiences. <i>Counselling & Psychotherapy Research</i> , 00, 1-16. https://doi.org/10.1002/capr.12742 | 1 = Does not focus on supporting Autistic children or young people |
| 19. Kapp, S. K., & Ne'eman, A. (2019). Lobbying autism's diagnostic revision in the DSM-5. In Kapp, S. (Ed.), <i>Autistic Community and the Neurodiversity Movement: Stories from the Frontline</i> (pp. 167-194). [Chapter 13] Springer Singapore. https://doi.org/10.1007/978-981-13-8437-0_13 | 7 = Book chapter |
| 20. Kwok, K., & Kwok, D. K. (2020). More than comfort and discomfort: Emotion work of parenting children with autism in hong kong. <i>Children and Youth Services Review</i> , 118, 105456. https://doi.org/10.1016/j.chilyouth.2020.105456 | 3 = Social Work perspective |
| 21. Lerner, M. D., Gurba, A. N., & Gassner, D. L. (2023). A framework for neurodiversity-affirming interventions for autistic individuals. <i>Journal of Consulting and Clinical Psychology</i> , 91(9), 503–504. https://doi.org/10.1037/ccp0000839 | 1 = Does not focus on supporting Autistic children or young people |
| 22. Liu, E. Y. (2017). Neurodiversity, neuroethics, and the autism spectrum. In <i>The Routledge Handbook of Neuroethics</i> (pp. 394-411). Routledge. | 7 = Book chapter |
| 23. Monteiro, M. J. (2020). The Transformative Power of the Autism Spectrum Narrative. In <i>A Spectrum of Solutions for Clients with Autism</i> (pp. 37-45). Routledge. | 7 = Book chapter |
| 24. Moody, C. T., Olabinjo, I. O., Baker, B. L., & Blacher, J. (2022). Hope in neurodiverse adolescents: Disparities and correlates. <i>Advances in Neurodevelopmental Disorders</i> , 6, 166-177. https://doi.org/10.1007/s41252-022-00242-0 | 2 = Did not focus on using neurodiversity concept |
| 25. Sorscher, N. (2022). Psychotherapy with patients with neurocognitive impairments. <i>Journal of Infant, Child, and Adolescent Psychotherapy</i> , 21(1), 72-89. https://doi.org/10.1080/15289168.2022.2050659 | 4 = Focus on supporting children with Learning Difficulties and ADHD |

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| <p>26. Pantazakos, T., & Vanaken, G.-J. (2023). Addressing the autism mental health crisis: the potential of phenomenology in neurodiversity-affirming clinical practices. <i>Frontiers in Psychology</i>, 14, 1225152. https://doi.org/10.3389/fpsyg.2023.1225152</p> | <p>1 = Does not focus on supporting Autistic children or young people</p> |
| <p>27. Pantazakos, T. (2023). Neurodiversity and psychotherapy—connections and ways forward. <i>Counselling & Psychotherapy Research</i>. https://doi.org/10.1002/capr.12675</p> | <p>1 = Does not focus on supporting Autistic children or young people</p> |
| <p>28. Trigueros, A. F. (2018). <i>Using parent-identified strengths of autistic children to advance strength-based intervention</i> (Doctoral dissertation, Walden University).</p> | <p>7 = Dissertation</p> |
| <p>29. Watson, S. & Constantino, C. D. (2022). <i>Ashawire, Leaderlive</i>. https://leader.pubs.asha.org/doi/10.1044/leader.FTR1.270520.22.ableism-autism.12/full/</p> | <p>7 = Website article</p> |
| <p>30. Warren, N., Eatchel, B., Kirby, A. V., Diener, M., Wright, C., & D’Astous, V. (2021). Parent-identified strengths of autistic youth. <i>Autism</i>, 25(1), 645-657. https://doi.org/10.1177/1362361320945556</p> | <p>4 = Focused on parent’s views of autism</p> |
| <p>31. Points from the SENCo-Forum. What makes educational needs ‘special’? (2018). <i>British Journal of Special Education</i>, 45(4), 473-476. https://doi.org/10.1111/1467-8578.12238</p> | <p>4 = Focus on Special Educational Needs</p> |
| <p>32. Defining optimal outcome in autism in an age of neurodiversity. (2018). <i>The Brown University Child and Adolescent Psychopharmacology Update</i>, 20(8), 1-3. https://doi.org/10.1002/cpu.30316</p> | <p>7 = Magazine article</p> |

Appendix B: Charting Table

| Author (Year) | Place Published | Type of article | Topic | Conclusions & Recommendations for practice |
|-------------------------------|-----------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Brown et al. (2021) | USA | Editorial | Using a neurodiversity perspective when assessing autism | It is important to support parents with the assessment and diagnosis of autism using a strengths-based and a warm and empathic communication, that listens to the family's needs. |
| Chapman and Botha (2023) | UK | Invited Review | How to apply neurodivergent informed therapy | To practice neurodivergent informed therapy, practitioners should accept and embrace neurodiversity by viewing difficulty as relational and accepting differences in the neurodivergent experience. |
| Cherewick (2023) | USA | Review | Neurodiversity-affirmative interventions for adolescents | Multi-level intervention designs should target social motivational learning in early adolescents, and then should be scaffolded to target executive functioning skills during mid-late adolescents due to increased neuroplasticity that occurs in adolescents' developmental trajectories. |
| Cherewick and Matergia (2023) | USA | Review | Conceptual Model of Autistic Strengths and Potential Mechanisms of Change to Support Positive Mental Health and Wellbeing in Autistic Children and Adolescents | Psychosocial interventions can focus on Autistic strengths that include perceptual, reasoning, expertise, and character strengths. These strengths can then support affective, behavioral, cognitive, and physiological to support mental health and wellbeing of Autistic children and young people |
| Dawson et al. (2022) | USA | Viewpoint | Exploring goals of Autism Early Behavioral Intervention using a Neurodiversity Perspective | Practitioners should consider Autistic children and their parents when setting intervention goals and use naturalistic behavioural interventions. |
| Fletcher-Watson (2022) | UK | Commentary | Exploring how transdiagnostic approaches can promote practitioners to use a neurodiversity-affirmative approach. | Using diagnostic labels are limited, and therefore a transdiagnostic approach that examines an individual's unmet needs and appropriate accommodations should be the focus |

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|----------------------------|--------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Heselton (2023) | Canada | Peer reviewed Review | Exploring childhood adversity, resilience, and autism | A neurodiversity-affirmative lens when supporting mental health to better meet the needs of Autistic individuals, by focusing on the interaction between Autistic identity, childhood adversity, and resilience |
| Izuno-Garcia et al. (2023) | USA | Peer reviewed Review | How using a neurodiversity approach can support Autistic children's wellbeing | Practitioners' recommendations to support Autistic children should provide meaningful goals for the family |
| Leadbitter et al. (2021) | UK | Peer reviewed Review | Exploring how practitioners need to consider Autistic self-advocacy and the neurodiversity concept when supporting early intervention | Environmental goodness-of-fit, Autistic developmental trajectories when creating intervention goals, and the autonomy and wellbeing of Autistic clients should all be taken into account in autism intervention. |
| Ne'eman (2021) | USA | Review | Reevaluating outcome measures of that moves from reducing symptoms to one | Autism measures should be reevaluated by including the neurodiversity perspective |
| Riccio et al. (2021) | USA | Mixed-methods design | Adolescent Autistic identity and parent perceptions of autism | Autistic adolescents whose mothers decided to discuss their autism diagnosis with them, spoke more favorably about both themselves and their Autistic identity than those whose mothers did not. It is recommended that parents discuss autism early with their children, using a neurodiversity aligned perspective. |
| Schuck et al. (2022) | USA | Commentary | Both neurodiversity and autism intervention can be applied when supporting children by using a naturalistic behavioural framework | As naturalistic behavioural interventions consider personal preferences, motivation, and relationships this approach can also be applied within the neurodiversity paradigm. |
| Schwartzman et al. (2023) | USA | Quantitative design | Investigating the preliminary feasibility, acceptability, and efficacy of a community-guided, autism-adapted | Neurodiversity-affirmative approaches can be adapted to group CBT in terms of treatment engagement, content, and delivery, which can improve Autistic adolescents' self-esteem, emotional reactivity, and depressive symptoms. |

| | | | | |
|--------------------------------|-----|-------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | group cognitive behavioral therapy for depression in Autistic youth (CBT-DAY). | |
| Sonuga-Barke and Thapar (2021) | UK | Review | Focuses on using neurodiversity in research and practice | Using a neurodiversity approach in research can explore Autistic individual's physical and social environment, Autistic individuals' experiences, and exploring neurodivergent strengths. Neurodiversity within practice will focus on the environment to support neurodivergent individuals, and interventions can use a strengths-based approach. |
| Turowetz et al. (2023) | USA | Case Study Design | Explored how professional interaction and age of the client can influence the autism diagnostic process by viewing video recordings. | Professionals were found to formulate an autism diagnosis differently depending on the age of a child. Professional viewed older children's autism as a deficit/difference, and also considered their identity as part of the diagnosis |

Appendix C: Mapping the Field: Empirical Studies

| Author (Year) | Aim | Participants | Method | Main finding |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Riccio et al. (2021) | To analyse the impact of parent disclosure of adolescents' autism diagnosis on adolescents' perception of autism & identity | N = 19 (adolescent & mother) 18 = male 1 = female 14-19 years | Mixed-methods design. Semi-structured interview with adolescent (self-concept, understanding of autism & other disabilities, plans for future education & employment) Online question with mothers to examine decisions to withhold or disclose autism diagnosis | Autistic adolescents who were disclosed their diagnosis described themselves more positively than those whose diagnosis was withheld from them |
| Schwartzman et al. (2023) | Investigating the preliminary feasibility, acceptability, and efficacy of a community-guided, autism-adapted group cognitive behavioral therapy for depression in Autistic youth (CBT-DAY) | N = 14 14 = male 5 = female 5 = non-binary 11-17 years | Pilot non-randomised trial 12-week intervention (CBT-DAY) Depressive symptoms, emotional reactivity and self-esteem assessed using self-report and caregiver report at four timepoints: baseline (week 0), midpoint (week 6), post-treatment (week 12), and follow-up (week 24) | CBT-DAY was effective in improving depressive symptoms, emotional reactivity and self-esteem post-intervention, and treatment gains were maintained at follow-up |

| | | | | |
|------------------------|---------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Turowetz et al. (2023) | Exploring how clinician-patient interaction and patient age shape the process and meaning of autism diagnosis | N = 49 | Case Study Design Researchers analysed video recordings of children assessed for autism | Children's age influenced how clinicians' formulation the diagnosis: with younger children, clinicians treat autism exclusively as a deficit, whereas with older children, clinicians viewed autism as a deficit/a social-cognitive difference |
|------------------------|---------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Appendix D: Articles by themes and subthemes

| | Assessment | | Intervention | | | Therapy | | | |
|-----------------------------|-----------------------|----------|------------------------------|-----------|-----------------|------------------|----------------|------------------------|-------------|
| | Assessment Approaches | Feedback | Naturalistic & Developmental | Needs-led | Strengths-based | Internal Drivers | Socially valid | Therapeutic Approaches | Adapted CBT |
| Brown et. al., (2021) | X | X | X | X | X | X | | | |
| Chapman & Botha (2023) | | | | | | | | X | |
| Cherewick (2023) | | | X | | | | | | |
| Cherewick & Matergia (2023) | | | | | X | | | | |
| Dawson et al., (2022) | | | X | X | | X | | | |
| Fletcher Watson (2022) | | | X | | | | | | |
| Heselton (2023) | | | | | | | | X | |
| Izuno-Garcia et al., (2023) | X | X | X | X | X | X | X | | |
| Leadbitter et al., (2021) | | | X | X | X | X | X | | |
| Ne'eman (2021) | | | X | | | | | | |

| | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|
| Ricco et al., (2020) | | X | | | | | | | |
| Schuck et al. (2022) | X | X | X | X | X | X | X | X | |
| Schwartzman et al. (2023) | | | | | | | | | X |
| Sonuga- Barke & Thapa (2021) | | | X | X | X | X | | | |
| Turowetz et al. (2023) | X | X | | | | | | | |

Appendix E: Interview Schedule

Research Title: 'An Exploration of Psychologists' attitudes towards neurodiversity and their influence on Professional Practice'

Thank you for agreeing to take part in this interview about your attitudes around Neurodiversity.


Primary Investigator will:

- Provide an overview of study,
- Gain verbal consent,
- Ask participants if they have any questions before beginning the interview.

1. How long have you been working as a psychologist?
2. What is your highest level of education?
3. Can you describe your current role and the service where you are employed as a psychologist? (i.e., Basic Grade/Senior)
 - How long have you been working in this service?
 - Have you other experience working as a psychologist in any other services prior to this post?
4. Can you share the age range and reasons for referral of these Autistic children and young people on your caseload?
5. Would you mind sharing your own neurology? (Are you neurodivergent or neurotypical?)
6. There are many definitions of what exactly the neurodiversity paradigm is in research is and in society. What is your understanding of the neurodiversity paradigm?
 - How were you first introduced to the neurodiversity paradigm and how was your work different before knowing about the neurodiversity paradigm and neurodiversity-affirmative practice?
7. The Neurodiversity Movement is a social activist movement that advocates for civil rights, equality, respect, and social inclusion of neurodivergent individuals. It has gained both support and criticism within the academic and advocacy communities. Some critics view the neurodiversity paradigm 'whitewash' Autism by overlooking the challenges of Autistic people and those with significant support needs (i.e. intellectual disabilities). Can you please share your perspective on the controversies surrounding the neurodiversity movement?
8. Can you describe what other factors you think may have influenced your professional practice to become more neurodiversity-affirmative? (e.g, For example, did you engage in CPD, try to change language to that of the Autistic community, or change approaches to practice by framing the Autistic experience?
 - How were they successful in affecting you to change?
9. Are there any legislation/policy or professional guidelines that guide you work?
 - How beneficial are these?
10. Do you make any environmental adaptations when supporting Autistic children/young people and their families?
11. In terms of assessment, how do you apply neurodiversity-affirmative approaches in assessment, formulation and feedback of an Autistic child or young person?
 - There have been debates regarding the wording of the DSM-5 criteria for Autism, do you consider this when referring to the DSM-5?
12. How do you use neurodiversity-affirmative approaches in parent/teacher consultations when supporting Autistic children or young people?

- How do you describe Autism to individuals you are working with?
 - How do you embrace Autistic identity?
 - How do you consider parents/carers neurology during your work?
13. Can you explain how you carry out neurodiversity-affirmative interventions when supporting Autistic children or young people?
 - Have your intervention goals changed in light of the neurodiversity-affirmative approaches? How so? (e.g. do you consider individual/communication preferences and target needs?)
 14. How do you incorporate neurodiversity-affirmative approaches in therapy when supporting Autistic children or young people?
 15. How would you describe your level of confidence and proficiency in utilizing neurodiversity-affirmative approaches?
 16. Can you share your thoughts and experiences regarding their potential opportunities and challenges or neurodiversity-affirmative approaches when supporting Autistic children and young people?
 17. In your opinion, do you think other psychologists work in a similar way? Why/Why not?
 - How do you think the level of experience of psychologists, or the contexts of services have an impact on conducting neurodiversity-affirmative approaches?
 18. Do you think the Autistic community would embrace your professional practices? Please explain.
 19. Within organisations, there can be systemic factors that influence professionals' work and practice. How much control do you feel you have in using neurodiversity-affirmative approaches in your services? How so?
 20. Are there any (other) barriers you can think of to implement neurodiversity-affirmative approaches?
 21. Are there any aspects of your work you would like to change to make it more neurodiversity affirmative? Please explain why?
 - What is easy or difficult about making these changes?
 - Are there any areas that you would like to gain more training in?

Thank you for taking part in the interview today. Is there anything you have not discussed which you would like to add before we finish up?

Appendix F: Recruitment e-flyer

**An Exploration of Educational
Psychologists' attitudes towards
Neurodiversity and their influence on
Professional Practice.**

My name is Aoife Mulrooney. I am a Trainee Educational and Child Psychologist at Mary Immaculate College (MIC), Limerick. I am carrying out a research study which aims to explore psychologists' attitudes towards Neurodiversity in relation to autism, and how these attitudes influence professional psychological practice. This research will be carried out under the supervision of Dr Siobhan O'Sullivan.

If you are an Educational Psychologist who works with autistic children and young people (0-18 years) within Children's Disability Network Teams (CDNT's), Primary Care Psychology, Child and Adolescent Mental Health Services (CAMHS), or the National Educational Psychology Service (NEPS), I would be very grateful for your participation.

Taking part will involve completing an online semi-structured interview on Microsoft Teams that will take a maximum of 1 hour.

Please contact me via email (21059861@micstudent.mic.ul.ie) if you would like to participate in the study. I will provide you with further information.

Appendix G: Participant Information Letter



An Exploration of Educational Psychologists' attitudes towards the Neurodiversity Paradigm and their influence on Professional Practice.

My name is Aoife Mulrooney. I am a postgraduate student completing the Professional Doctorate in Educational and Child Psychology, in the Department of Educational Psychology, Inclusive and Special Education in Mary Immaculate College, Limerick. I am carrying out research to explore Educational Psychologists' attitudes towards the Neurodiversity Paradigm, and how these attitudes influence their professional practice. This research study will form part of my doctoral thesis. The study is conducted under the supervision of Dr Siobhan O'Sullivan.

Purpose and Description of Study

A key role of Educational Psychologists working with Autistic children and young people is to provide psychological assessment and intervention informed by an evidence-base and following professional practice guidelines.

Neurodiversity is an umbrella term that considers the unique neuro-cognitive variability of humankind (Singer, n.d.). The Neurodiversity Movement was initiated by the Autistic community and aimed to alter how the public perceives neurodivergence (Singer, n.d.). It aims to replace deficit-based perceptions of neurodivergent individuals with a more balanced view of their needs and abilities, and to demonstrate the positive effects of including neurodivergent individuals in society (Leadbitter et al., 2021; Singer 1998, 2020). Although neurodiversity is a very topical debate in society, neurodiversity is difficult to define. This has caused individuals to create their own meanings and create their own definitions of neurodiversity (Dwyer, 2022).

Professional guidelines for psychologists promote professional practice based on a Neurodiversity Paradigm during assessment, formulation and when diagnosing autism (Psychological Society of Ireland, 2022). However, there appears to be some discrepancy between these guidelines and the language used in diagnostic manuals and assessments tools that psychologists use. Little empirical evidence has been carried out to explore how professionals view and use neurodiversity-affirmative approaches. Therefore, this study aims to explore what are educational psychologists' attitudes towards the Neurodiversity Paradigm, and how these attitudes influence their psychological practice. It is hoped that this research will provide insight into neurodiversity-

affirmative practices to support an understanding of the implications of the Neurodiversity Paradigm for Autistic children and young people.

Participation in the Research Study

Qualified Educational Psychologists who work with Autistic children and young people (0-18 years) in Children's Disability Network Teams (CDNT's), Primary Care Psychology, Child and Adolescent Mental Health Services (CAMHS), and the National Educational Psychology Service (NEPS) are invited to take part in a one-one interview with the Principal Investigator (Aoife Mulrooney). Interviews will take place on Microsoft Teams and take a maximum of one hour to complete. The interview will be recorded on Microsoft Teams before being transcribed. The interview will aim explore what are psychologists' attitudes towards Neurodiversity, and how these attitudes influence their psychological practice.

Confidentiality, Anonymity and Right to Withdraw

Pseudonyms will be used during the transcription phase, and all identifying information will be anonymised. Recordings and transcriptions of the interviews will be stored initially on an encrypted to a password-protected file. In accordance with the MIC Record Retention Schedule, anonymised interview transcripts may be held indefinitely or as required by the Principal Investigator. Data from all the interviews will be summarised and presented into themes to provide findings to answer the research questions. Participant quotes will be used to support study findings. The study may be disseminated at conference presentations, and a published paper.

Participants have the right to withdraw from the study any time without giving a reason. Any data collected will be deleted.

Contact Details

Please contact me via email (21059861@micstudent.mic.ul.ie) if you would like to take part in this study. If at any time you have any queries / issues with regard to this study, please email me or my supervisor Dr Siobhan O'Sullivan (siobhan.osullivan@mic.ul.ie).

This research study has received ethical approval from the Mary Immaculate College Research Ethics Committee (MIREC) (A23-007). Please contact Mary Collins, MIREC Administrator, Mary Immaculate College, Limerick Telephone: 061-204980 E-mail: mirec@mic.ul.ie, if you wish to contact an independent authority if you have any concerns regarding this research.

Many thanks,

Aoife Mulrooney

Appendix H: Informed Consent Form



Consent Form

Study Title: An Exploration of Educational Psychologists' attitudes towards Neurodiversity and their influence on Professional Practice.

This study is undertaken by Aoife Mulrooney under the supervision of Dr Siobhan O'Sullivan as part fulfilment of the Professional Doctorate in Educational and Child Psychology in Mary Immaculate College (MIC), Limerick.

I, _____ voluntarily agree to take part in the research study. Please read the statements below to ensure you understand the following:

- 6 I have read and understood the Participant Information Sheet.
- 7 I understand the purpose and nature of the research study, and what the results will be used for.
- 8 I consent to the interviews being recorded on Microsoft Teams and transcribed by the researcher.
- 9 Data from my interview will be anonymised and stored in an encrypted password-protected file.
- 10 I understand that all information I provide will be treated confidentially.
- 11 I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- 12 I understand that disguised extracts from my interview may be quoted in my dissertation and any associated conference presentations and published papers.
- 13 I understand that in accordance with the MIC Record Retention Schedule, anonymised interview transcripts may be held indefinitely or as required by the principal investigator.
- 14 I am participating in this interview voluntary and am aware that I can withdraw from the study at any time without any repercussions.

I acknowledge that I have read the following and accept to take part in the research study by signing my name below.

Name of Participant (PRINTED): _____

Name of Participant (Signature): _____

Date: _____

Appendix I: Application of Thematic Analysis (Wiltshire & Ronkainen, 2021)

| Ontological domain | Type of theme | Generating themes | Enhancing rigour |
|-------------------------------------------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Observed experiences and events in the 'empirical domain.' | Experiential themes | <p>Develop nascent experiential themes by describing participants' intentions, hopes, concerns, feelings, and beliefs in lay-terms from the first transcript, listing them as discrete data-driven themes.</p> <p>For each new transcript, think deductively to check the recurrence of themes as well as looking for new data-driven themes.</p> <p>List all themes in a master list, noting regularities and the strength of each theme across the data.</p> | <p>Be mindful of whether experiential themes are adequately supported by data (empirical adequacy), accurately describe factual information (descriptive validity), and closely represent participants' experiences (interpretive validity).</p> <p>If multiple researchers have generated themes (recommended), compare themes using a consensus document leading to a combined list of mature experiential themes. Aim to add themes that were missed by a single researcher and further expose themes to checks for empirical adequacy and descriptive and interpretive validity.</p> <p>Where practical, provide interview participants with a list of experiential themes generated from their interview. Revise themes if misunderstandings have been found.</p> |
| Unobserved but occurring experiences and events in the 'actual domain.' | Inferential themes | <p>Derive nascent inferential themes from each experiential theme.</p> <p>Think inductively to infer what might be occurring in the world beyond the sample population and abductively to redescribe the theme in more conceptually abstract terms if this adds value.</p> | <p>Be mindful of whether inductive and abductive claims can reasonably be considered as plausible reflections of what occurs in the world (ontological plausibility) and whether abductive claims begin to lose interpretive validity.</p> <p>If multiple researchers have generated themes (recommended), compare themes using a consensus document. Aim to add concepts that were missed by a single researcher and further expose themes to checks for ontological plausibility and interpretive validity.</p> |

| | | | |
|---------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unobservable causal powers and potential mechanisms in the 'real domain.' | Dispositional themes | Derive nascent dispositional themes from each inferential theme. Think retroductively by postulating theories about the properties that must exist in order to produce the phenomena being studied. | Be mindful of whether retroductive claims have a sound logical basis (judgemental rationality) and consider the extent to which they account for what the analysis has so-far revealed (explanatory power). If multiple researchers have generated themes (recommended), compare themes using a consensus document. Aim to add themes that were not considered by a single researcher and further expose themes to competition and disputation. |
|---------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Appendix J: Experiential themes on NVivo

The screenshot displays the NVivo software interface. At the top left, a document icon is labeled "Participant 2". A blue bar with the text "Click to edit" spans the top of the main content area. The transcript is divided into two sections:

Researcher 50:51
Hmm.

Participant 2 50:52
really challenging. really, I think that, you know, if then you know, you're almost setting people up for failure and.

But in terms of I think so. So that piece certainly I think poses huge challenges and I think we need more research, more well like yourself, you know, well conducted research that the broadens that empirical base, and that I suppose that we are conscious as well that and you know we get the perspectives of a wide range of people that are, you know impacted. And I think it's psychologist we see that people who have lived experience there's a real value in that, but also in well conducted research you know so trying to get that balance, so that we're well guided in the assessment and intervention, approaches that we we take.

On the right side, a vertical sidebar titled "Coding Density" lists several codes with corresponding colored bars indicating their density in the text:

- concerned ethically about behavioural-based interventions
- learns through supervision
- makes environmental adaptations in clinic to support autistic kids
- The interaction between the individual and their environment
- views environmental challenges can make neurodivergent people disabled
- concerned that there is limited guidance and evic
- does not have enough time to build relationships with CYP
- offers support in different forms depending on clients preferences
- concerned about lack of services
- feels like they have shifted their intervention goals
- considers parent's neurology

At the bottom of the interface, there is a "Code At" field with a dropdown menu, a text input field containing "Enter node name (CTRL+Q)", and a set of icons for document management.

Appendix K: Dispositional Themes in NVivo

The screenshot displays the NVivo 12 Plus software interface. The title bar reads "Thesis Analysis.nvp - NVivo 12 Plus". The ribbon menu includes tabs for File, Home, Import, Create, Explore, and Share. The main workspace shows a "Nodes" table with the following data:

| Name | Files | References | Created On | Created By | Modified On | Modified By |
|------------------------------------|-------|------------|------------------|------------|------------------|-------------|
| Cognitive Component of Attitudes | | 0 | 06/11/2023 16:33 | AM | 06/11/2023 16:33 | AM |
| Behavioural Component of Attitudes | | 0 | 06/11/2023 16:28 | AM | 06/11/2023 16:33 | AM |
| Percieved behavioural control | | 0 | 06/11/2023 10:26 | AM | 06/11/2023 10:27 | AM |
| Barriers | | 0 | 02/11/2023 11:50 | AM | 02/11/2023 11:50 | AM |
| Professional Practice | | 0 | 06/11/2023 16:36 | AM | 06/11/2023 16:36 | AM |
| Subjective Norms | | 0 | 06/11/2023 12:39 | AM | 06/11/2023 12:39 | AM |
| Affective Component of Attitudes | | 0 | 06/11/2023 16:33 | AM | 06/11/2023 16:33 | AM |
| Behavioural Intentions | | 0 | 06/11/2023 17:08 | AM | 06/11/2023 17:08 | AM |

The interface also features a "Quick Access" sidebar on the left with categories like Files, Memos, Nodes, Data, Codes, Cases, and Notes. The bottom status bar shows "AM 270 Items".

Appendix L: Example of how Dispositional Themes were considered

| Nascent Dispositional Theme | Explanation | Mature Dispositional Theme decided |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| The inferred phenomenon is dependent upon the evolving landscape of societal attitudes towards neurodiversity. | focuses on how changes in societal attitudes towards neurodiversity impact educational psychologists' practices. It reflects a shift in societal norms and expectations around neurodiversity. | The Evolving Landscape of Neurodiversity-Affirmative Practices |
| The inferred phenomenon is dependent upon the evolving landscape of acceptance and appreciation of neurodiversity within professional practices. | explores how the acceptance and appreciation of neurodiversity within professional settings influence educational psychologists' approach. | |
| The inferred phenomenon is dependent upon the evolving landscape of educational psychologists' professional identities and their alignment with neurodiversity-affirmative approaches. | examines how shifts in the professional identities of educational psychologists influence their ability to adopt neurodiversity-affirmative approaches. | |
| The inferred phenomenon is dependent upon the ongoing shifts in societal norms and values. | focuses on how changing societal norms and values impact practices and perceptions around neurodiversity. | |
| The inferred phenomenon is dependent upon continuous professional learning and adaptation. | explores the need for ongoing learning and adaptation among educational psychologists to stay current with neurodiversity-affirmative practices. | |
| The inferred phenomenon is dependent upon efforts to reduce uncertainty in practice | addresses how reducing uncertainty in practice can impact the adoption of neurodiversity-affirmative approaches. | |
| The inferred phenomenon is dependent upon the diverse perspectives within the neurodiversity community. | highlights how diverse perspectives within the neurodiversity community influence educational practices. | |

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--|
| The inferred phenomenon is dependent upon the willingness to implement neuro-affirmative practices. | focuses on the necessity of willingness and openness among educational psychologists to adopt neurodiversity-affirmative practices. | |
| The inferred phenomenon is dependent upon multidisciplinary team dynamics. | focuses on how dynamics within multidisciplinary teams affect the application of neurodiversity-affirmative practices. | |
| The inferred phenomenon is dependent upon balancing respect for different opinions. | the challenge of balancing diverse opinions while implementing neurodiversity-affirmative practices. | |
| The inferred phenomenon is dependent upon conflicting opinions between traditional practices and neurodiversity-affirmative approaches. | conflict between traditional educational practices and new neurodiversity-affirmative approaches | |
| The inferred phenomenon is dependent upon the pressure to conform to the popular narrative of neurodiversity. | how pressure to conform to popular narratives around neurodiversity impacts practice. | |

Appendix M: Reflective Memos

2 August 2023

Researcher Identity Memo (Maxwell, 2005)

I have extensive experience working with Autistic individuals. This includes supporting Autistic students in a university setting by providing academic, social, and wellness support.

Additionally, during my doctorate studies in education and psychology, I gained valuable experience working with Autistic children and young people within disability services and various school settings, including mainstream and special schools catering to children with higher levels of need.

My work involves implementing evidence-based interventions and assisting families in creating strength-based goals to support their family members. I also provide support to teachers and schools in their efforts to accommodate Autistic students. Through my coursework, I have deepened my understanding of the Autistic community and its advocacy for a shift from a deficit-based to a strength-based support model. I have attended training sessions and engaged in reading and discussions on social media to gain insights into this evolving approach.

In my research, I have encountered counterarguments regarding neurodiversity, some of which reject the notion of intervention. I have taken the time to reflect on these perspectives and conducted further research to better understand this debate.

Given my experiences and reflections, I believe that researching this area is of utmost importance. The ongoing debate calls for a study on psychologists' attitudes and practices to identify any discrepancies between personal attitudes and systematic approaches in supporting the Autistic community in Ireland. Emphasizing the importance of a strength-based approach, I strive to adapt my own language and problem-solving methods accordingly.

I hope that this research will contribute to more neurodiversity-affirmative practices among professionals, particularly within school settings and teaching environments. I recognize the value of engaging in open discussions and welcoming feedback, especially during the pilot phase of the research.

However, I am mindful of the ever-changing landscape of autistic supports and neurodiversity advocacy over the last few decades. While my research is relevant at present, I acknowledge the need to stay aware of potential changes in the Autistic community's needs and perspectives.

One significant assumption guiding my research is that a neurodiversity-affirmative approach is the way forward for practice and is best aligned with the interests of the Autistic community. I will actively address this assumption during the interviews and data analysis, recording my reflections in a journal throughout the research process.

Regarding previous interventions for autism, I have learned about applied behaviour analysis (ABA) during my studies. Although some within the Autistic community consider it an unethical practice, research suggests that certain aspects of ABA can be effective in developing developmentally appropriate skills for Autistic children, such as toileting and adaptive skills.

However, I disagree with attempting to "normalise" Autistic behaviour to fit societal norms, as this can lead to negative consequences like masking, camouflaging, and mental health difficulties.

In conclusion, my past experiences, combined with my ongoing studies and research, have led me to believe that promoting a neurodiversity-affirmative approach is essential for professionals working with Autistic individuals. I hope this research will offer practical guidance to psychologists and other professionals, aiding them in adopting more supportive and inclusive practices.

Researcher Relationships (Maxwell, 2012)

During the semi-structured interviews, my primary goal is to create a comfortable atmosphere for the participants to discuss their attitudes and beliefs regarding the neurodiversity paradigm. To achieve this, I plan to build a good relationship and rapport with the participants from the outset.

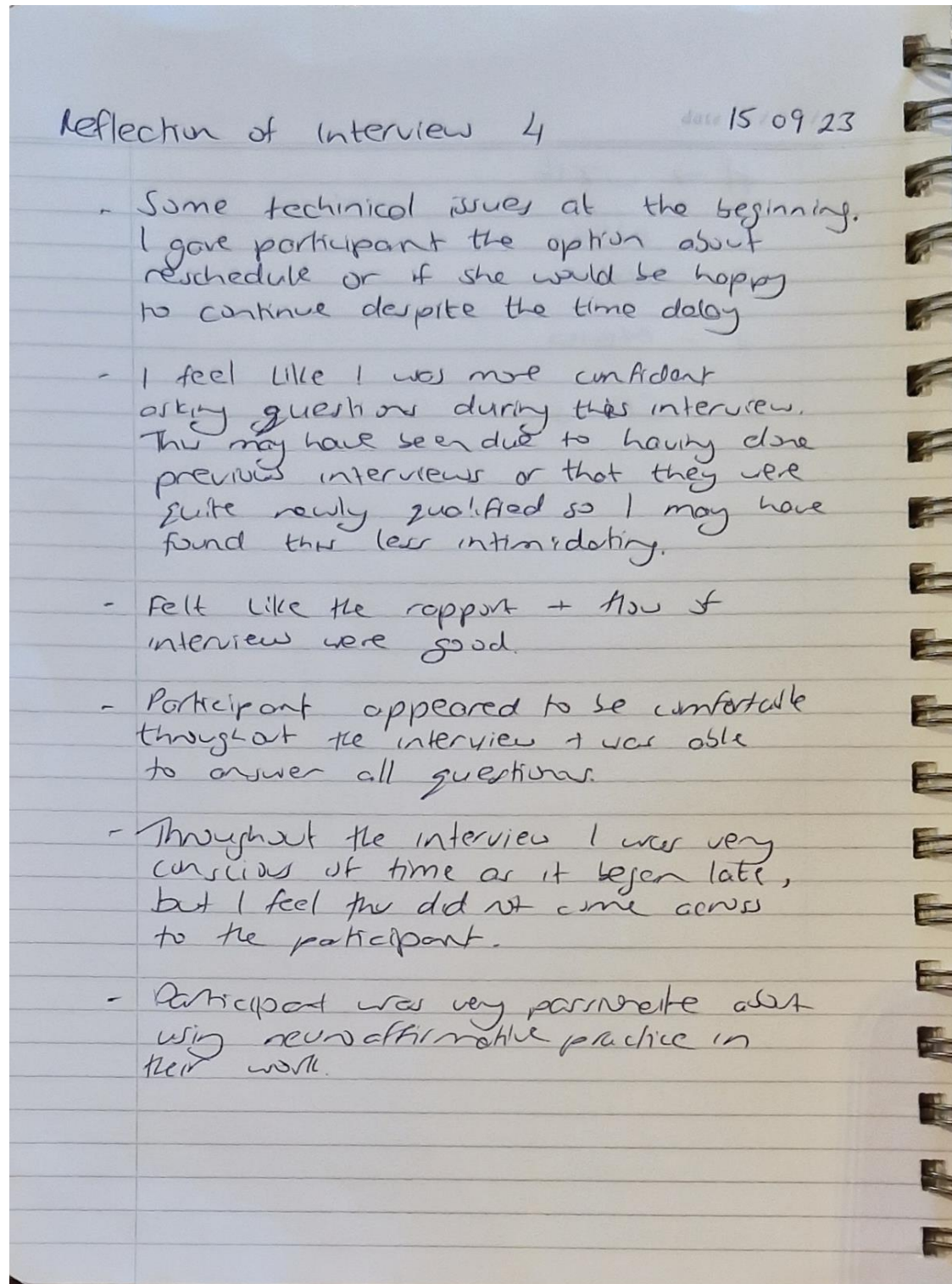
By establishing trust and reminding them of the informed consent process, emphasizing confidentiality, anonymity, and the right to withdraw at any time, I aim to put the participants at ease and avoid pressuring them into sharing more than they are comfortable with.

I acknowledge that some participants may hold different opinions from my own. In such cases, I will need to reflect on any biases that may have influenced my perceptions during the interview.

I will also take note of the dynamics of the relationship during the interview to maintain objectivity.

As a doctoral student, I understand that some participants may perceive me as relatively new to this field, which might impact my confidence during the interviews. However, I am committed to thoroughly understanding the participants' disclosures to gain deeper insights into their thoughts and subjective experiences. To enhance my interview skills, I plan to practice and seek feedback from my fellow classmates and other psychologists, which I believe will boost my confidence and improve the flow of the interviews.

Given my advocacy and strong belief in neurodiversity-affirmative practice, participants may perceive me as innovative and dedicated to improving practices. These perceptions could influence their decision to participate in the study and the extent to which they share information and opinions. Therefore, I will remain aware of how my beliefs might affect the study's dynamics and strive to maintain a neutral and open-minded approach throughout the interview.

Appendix N: Excerpt of Reflective Journal

Appendix O: Evidence of Ethical Approval from MIREC

MIREC-5, Created November 2021



MIREC-5

Research Ethics Committee

MIREC Final Decision Form

APPLICATION NUMBER:

A23-007

1. PROJECT TITLE

An Exploration of Psychologists' attitudes towards Neurodiversity

2. APPLICANT

| | |
|------------------------------|----------------------------------|
| Name: | Aoife Mulrooney |
| Department / Centre / Other: | EPISE |
| Position: | Postgraduate Researcher (DECPSy) |


3. DECISION OF MIREC CHAIR (✓)

| | |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Ethical clearance through MIREC is not required and therefore the applicant need take no further action in this regard. |
| <input checked="" type="checkbox"/> | Ethical clearance is required and is hereby granted by the Chair without need for referral to the MIREC committee. |
| <input type="checkbox"/> | Ethical clearance for a funding application or a similar purpose is granted by the Chair <i>pro tem</i> without need for referral to the MIREC committee. However, the applicant must subsequently seek ethical clearance from MIREC prior to embarking on any related project work involving human participants or their data. |
| <input type="checkbox"/> | Ethical clearance is granted following review of the application by the MIREC committee. |
| <input type="checkbox"/> | Ethical clearance is not granted following review of the application by the MIREC committee. |

4. REASON(S) FOR DECISION

I have reviewed this application and I am satisfied it meets MIREC requirements. It is, therefore, approved.

5. SIGNATURE OF MIREC CHAIR

| | |
|---------------|-----------------------------------------------------------------------------------|
| Name (Print): | Dr Marie Griffin |
| Signature: |  |
| Date: | 3 rd March 2023 |

Appendix P: JBI Critical Appraisal Checklist for Qualitative Research

Reviewer Aoife Mulrooney Date 3 January 2024

Author Aoife Mulrooney Year 2024

| | Yes | No | Unclear | Not applicable |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------|--------------------------|--------------------------|
| 1. Is there congruity between the stated philosophical perspective and the research methodology? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is there congruity between the research methodology and the research question or objectives? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is there congruity between the research methodology and the methods used to collect data? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is there congruity between the research methodology and the representation and analysis of data? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is there congruity between the research methodology and the interpretation of results? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is there a statement locating the researcher culturally or theoretically? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is the influence of the researcher on the research, and vice-versa, addressed? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are participants, and their voices, adequately represented? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data? | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |