



Taking an Interest: The Impact of Including Autistic Children’s Absorbing Interests in Learning Experiences - A Neuro-affirmative Approach.

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Abstract

Background and Aims: Despite policy advances and increased understanding of Autism, Autistic children continue to face barriers to inclusive education (Bailey & Baker 2020; Lynam et al., 2024; Stephenson et al., 2021). This research considers the impact and feasibility of an Interest Map that weaves absorbing interests into learning experiences, aiming to identify factors that support positive experiences of interest-based learning for Autistic children. It explores the perspectives of Autistic children, their parents and teachers on their experiences of absorbing interests using neuro-affirmative approaches that prioritise Autistic voice.

Methodology: This study employed an instrumental qualitative case-study design (Stake, 1995). Participants included four Autistic children attending three primary school special classes, their teachers, and parents. Informed by data collected using the Mosaic Approach (Clark, 2017), an individualised Interest Map was created for each child linking their articulated absorbing interest to educational targets. Semi-structured interviews and reflective dialogues were facilitated with parents and teachers. Data were analysed using Reflexive Thematic Analysis (Braun & Clarke, 2019).

Results: Insights are provided into the experience of absorbing interests from child, parent and teacher perspectives. Findings indicate that there are benefits across academic, social and affective domains when Autistic children's absorbing interests are included in educational activities. Facilitators and barriers are discussed when considering the feasibility of implementing the Interest Map.


Implications: As well as responding to the dearth of Autistic children's voice in research, this study contributes valuable findings to the relatively under-researched area of absorbing interests. Findings have implications across policy and practice dimensions for educators and Educational and Child Psychologists. Accentuating benefits accruing from interest-based learning across policy and curricula, as well as including practical strategies in national and school-level programmes, presents a pragmatic way forward to mitigate barriers to inclusion and transform Autistic children's educational experiences (O'Sullivan & Ring, 2024; Ring, 2024).

Key Words: Autism, Inclusive Education, Special Interests, Monotropism, Child Voice

Declaration

I hereby declare that this thesis is entirely my own work and has not been submitted for any other awards at this or any other academic establishment. Where use has been made of the work of other people, it has been fully acknowledged and referenced.

Name: Elle Drohan

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Abbreviations

| | |
|--------|---|
| ALACT | Action, Looking Back, Awareness of Essential Aspects, Creating Alternative Methods of Action, Trial |
| ASD | Autism Spectrum Disorder |
| APA | American Psychological Association |
| CASP | Critical Appraisal Skills Programme |
| CAST | Centre for Applied Science and Technology |
| DCD | Developmental Coordination Disorder |
| DECPsy | Doctorate in Educational and Child Psychology |
| DoE | Department of Education |
| DCEDIY | Department of Children, Equality, Disability, Integration and Youth |
| DSM | Diagnostic and Statistical Manual |
| ECP | Educational and Child Psychology |
| EPSEN | Education of Persons with Special Educational Needs |
| ERIC | Education Resources Information Centre |
| GoI | Government of Ireland |
| IPA | Interpretative Phenomenological Analysis |
| MIREC | Mary Immaculate Research Ethics Committee |
| NAS | National Autistic Society |
| NCCA | National Council for Curriculum and Assessment |
| NCSE | National Council for Special Education |
| NEPS | National Educational Psychological Service |
| NICE | National Institute for Clinical Excellence |

| | |
|--------|--|
| PRISMA | Preferred Reporting Items for Systematic Reviews and Meta-Analyses |
| PSI | Psychological Society of Ireland |
| RTA | Reflexive Thematic Analysis |
| RQ | Research Question |
| SDT | Social Determination Theory |
| SNA | Special Needs Assistant |
| SSP | Student Support Plan |
| UDL | Universal Design for Learning |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| UNCRC | United Nations Convention on the Rights of the Child |
| UNCRPD | United Nations Convention on the Rights of Persons with Disabilities |
| WoE | Weight of Evidence |

Chapter 1. Introduction

1.1 Defining Autism

Autism is a neurotype characterised by differences in social communication and sensory processing domains, as well as differences in patterns of behaviour and interest (American Psychological Association (APA), 2022). Conceptualisations of Autism have changed significantly in recent decades, as understandings of Autism have developed within wider society. In particular, the Diagnostic Statistics Manual of Mental Disorders Fifth Edition (DSM-V) initiated changes to Autism diagnostic criteria (APA, 2013). This included classifying Autism within a single diagnostic category occurring along a spectrum, thus eliminating previous subtype diagnoses such as Asperger Syndrome and Pervasive Developmental Disorder (Grant & Nozyce, 2013). DSM-V also marked a shift from conceptualising Autism as a triad of differences across social interaction, communication and restricted, repetitive behaviour domains, to a dyad of differences, whereby social interaction and communication are collapsed into one social communication domain (Grant & Nozyce, 2013). Subsequently, DSM-V-Text Revised (DSM-V-TR) provided greater clarity on diagnoses that frequently co-occur with Autism, as well as emphasising the impact of cultural and gender-based factors on Autistic presentation (APA, 2022).

Following increasing awareness of Autism and broadening diagnostic criteria, a rise in Autism identification and prevalence rates has been documented nationally and internationally (Department of Health, 2018; McConkey, 2020; National Council of Special Education (NCSE), 2022). According to existing data, it is estimated that Autistic people represent 3.38% of the population in Ireland (NCSE, 2022). This is substantiated by growing demands for resources across national healthcare, community and education services, including a 584% rise in special classes between 2010-2022, coupled with ongoing demand for additional classes (NCSE, 2024).

1.1.1 Medical and Social Perspectives on Autism

Despite being a key tool in shaping research (Pellicano & den Houting, 2022), criteria used to identify Autism, including those in DSM-V-TR, continue to align with a deficit model, characterising Autism as a lack of skills in social communication and executive functioning domains, unusual sensory responses and restricted and repetitive behaviours (APA, 2022), as well as often ranking Autistic individuals on a low to high-functioning scale

(Anderson-Chavarria, 2022). Research highlights the limitations of static diagnostic criteria and deficit-based models, suggesting that these overlook Autistic strengths including highly attuned visual-spatial awareness, hyperfocus and aptitude for pattern recognition (Anderson-Chavarria, 2022; Pellicano & den Houting, 2022). Categorisation of individuals as ‘low’ or ‘high’ functioning may impose a ceiling on potential achievement. In addition, the spectral conceptualisation of Autism may be overly simplistic, failing to capture the diversity of Autistic experiences and the variable, non-linear nature of Autistic strengths and needs (Anderson-Chavarria, 2022; Izuno-Garcia, McNeel & Fein, 2023). Deficit-based models significantly impact Autistic individuals as they strive to construct an identity and sense of agency outside of their diagnosis (Anderson-Chavarria, 2022) and can lead to camouflaging of Autistic traits, which is highly conducive to exhaustion, low self-esteem and burnout (Botha, Dibb & Frost, 2022; Halsall, Clarke & Crane, 2021; Pellicano & den Houting, 2022). In contrast, social models shift the focus from “within-person” to consider the interactional context and how it makes differences more salient. Social models highlight the impact of environmental barriers, societal oppression and exclusion on Autistic individuals, endorsing removal of such barriers to facilitate meaningful participation and inclusion in society (Anderson-Chavarria, 2022). Nonetheless, social models have been critiqued for neglecting biological and embodied components of neurodevelopmental differences (Adam & Koutsoklenis, 2023), as well as for failing to value Autistic identity.

1.1.2 The Neurodiversity Paradigm

Aiming to transcend conflict between medical versus social models of Autism, the Neurodiversity Paradigm is currently at the forefront of much research, as well as public debate (Botha et al., 2024; Silberman, 2015), cultivating a strong shared identity within the Autism community (Department of Children, Equality, Disability, Integration and Youth (DCEDIY), 2024). The term neurodiversity, first referred to by Blume (1998) and Singer (1999), has been collectively developed and theorised by Autism activists and researchers (Botha et al., 2024; Leadbitter et al., 2021). The Neurodiversity Paradigm frames Autistic differences within the context of overall biodiversity, positing that difference is a vital part of human experience and celebrating the unique abilities of each individual (Axbey et al., 2023; Silberman, 2015). This negates ideas that there is one ‘typical’ way of functioning or being (Leadbitter et al., 2021) and disregards binaries of ‘normal’ and ‘abnormal’. According to this perspective, whilst affirming that Autistic individuals present with differences in social

communication and sensory processing, as well as particular patterns of preferences and interests, these are only deemed ‘atypical’ when compared against neurotypical norms.

The Autistic experience is one of variability due to heterogenous individual and contextual factors (Anderson-Chavarria, 2022; Cooper et al., 2021). The Neurodiversity Movement has been critiqued by those who feel that it does not adequately represent or include voices of Autistic individuals with high support needs, lower cognitive abilities or co-occurring mental health challenges who may be unable to advocate for themselves (Izuno-Garcia, McNeel & Fein, 2023; Leadbitter et al., 2021). Some fear that the movement may infringe upon this cohort’s access to resources (Dwyer, 2022). Converse to this is the argument that the Neurodiversity Paradigm does not diminish obstacles faced by Autistic people, instead proposing that barriers typically arise from a neurotypical society that does not adequately support Autistic differences and preferences (Cooper et al., 2021; Pellicano & den Houting, 2022). The Neurodiversity Movement signifies a change from deficit-based, stigmatising terminology including ‘disorder’ and ‘impairment’, instead favouring identity-first language such as ‘Autistic individual’ to reflect the preferences of the Autism community (Botha, Dibb & Frost, 2022; Cooper et al., 2021). The current research aligns with the conceptualisation and understanding of Autism endorsed by the Neurodiversity Paradigm and endeavours to use non-pejorative, neuro-affirmative terminology to describe the Autistic experience.

Furthermore, the Neurodiversity Movement advocates for inclusion of Autistic voice in research using participatory approaches and accounts of lived experiences to cultivate nuanced, multidimensional understandings of Autism (Dawson, Franz & Brandsen, 2022; Leadbitter et al., 2021; Pellicano & den Houting, 2022; Silberman, 2015). This prompts policy and practice to enhance support systems and bolster inclusion of Autistic individuals within education and wider society. Seeking Autistic perspectives to inform research and policy agendas marks a stark change from historical trends whereby researchers and policymakers often presumed priorities based on neurotypical ideals (Pellicano & den Houting, 2022). The Neurodiversity Paradigm also challenges assumptions around intervention goals for Autistic individuals, moving away from normative social skills building and changing Autistic behaviours (Schuck et al., 2022). Instead, we are urged to increase societal understanding of Autism, seek the individual’s views and build adaptive and regulatory skills whilst respecting Autistic identity through neuro-affirmative practice and strengths-based approaches (Dawson, Franz & Brandsen, 2022; Izuno-Garcia, McNeel &

Fein, 2023; Milton et al., 2023; Schuck et al., 2022). Such approaches encourage “enhancing activities or skills that naturally lead to learning, social connection and wellbeing” (Leadbitter et al., 2021, p.4), denoting a change from the exclusive focus placed on communication and social challenges.

1.2 Irish Inclusive Educational Policy and Practice Context

As well as reformed understandings of Autism, over the past century Ireland has witnessed an evolution of its inclusive educational landscape and the development of myriad policies, legislation, frameworks and strategic plans (United Nations Educational, Scientific and Cultural Organisation (UNESCO), 1994; Government of Ireland (GoI), 1993, 1998, 2004, 2022; Ring, 2024). These now govern the rights-based inclusion of Autistic children in education and have radically changed the lens through which inclusive education is viewed. However, research stipulates that despite significant policy advances, Autistic children continue to face barriers to inclusion in education (Bailey & Baker 2020; Horgan, Kenny & Flynn, 2023; Lynam et al., 2024; Stephenson et al., 2021; Warren et al., 2021; Wood, 2023). Similar findings are reflected in the Autism Innovation Strategy (2024) which aims to “provide the building blocks for a more inclusive society where Autistic people are understood and have equity of opportunity” (DCEDIY, 2024, p.5). Consultation with members of the Autism community to inform this strategy identified lack of access to appropriate education and a dearth of public understanding perpetuating negative stigma as core challenges facing Autistic individuals (DCEDIY, 2024).

Removal of such barriers is crucial from rights-based and legislative perspectives following Ireland’s ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) in 2018. Herein, under Article 24, Ireland committed to ensuring that persons with disabilities are not excluded from education on the basis of disability and receive the supports required to meaningfully participate. The NCSE subsequently advised on the progressive realisation of a system whereby all children can access an inclusive education (DoE, 2024a; Florian, 2019; NCSE, 2024). Within the current educational landscape in Ireland, educational provision is based on the complexity of children’s needs and resources available in educational settings (DoE, 2024a; NCSE, 2024), and occurs along a continuum across mainstream classes, special classes in mainstream schools, and special schools (Banks & McCoy, 2017; Shevlin & Banks, 2021). In the current research, inclusive education is conceptualised not by prescribing education in mainstream school for all Autistic children, but in terms of cultivating a setting that is responsive to the

child (DoE, 2024a; Merrigan & Senior, 2023). This aligns with parent and teacher reports, prioritising the child's sense of belonging and access to specialist supports and resources that accommodate their needs (NCSE, 2024). Moreover, the researcher believes that a truly inclusive system involves working with Autistic children and finding ways to support meaningful inclusion in education, while affirming Autistic identity. In practice, this requires educational professionals to transcend conflicts between dual systems of mainstream versus special education and individualisation (Florian, 2019; Kenny, McCoy & Mihut, 2020; Merrigan & Senior, 2023; Shevlin & Banks, 2021) to instead focus on the fundamental shared goal of meeting the child's needs.

1.3 Interest-Based Learning as a Universal Design for Learning Approach

Universal Design for Learning (UDL) involves embedding inclusive practices into typical routines and curricular experiences to respond to diversity whilst catering for all learners (Centre for Applied Special Technology (CAST), 2024; Florian, 2019; Ring & O' Sullivan, 2021). A central tenet of UDL is that inclusive education should not be viewed as an "add on" for some children (Florian, 2019; Ring & O' Sullivan, 2021), nor should it be a "one size fits all approach", disregarding the heterogeneity of Autistic interests, experiences and abilities (Molloy & Farrell, 2024). Rather, UDL proposes that adapting learning outcomes and shaping pedagogies to suit individual children's needs proactively supports all. UDL is harmonious with recent curricular reform, departing from prescriptive, static curricula to emergent, dynamic curricular frameworks (Coolahan et al., 2017; NCCA, 2019; NCCA, 2023a; NCCA 2023b; Ring & O' Sullivan, 2021) which highlight the role of children's engagement (DoE, 2024; Turner, Ring & O' Sullivan, 2020). The recently developed Primary Curriculum Framework for Primary and Special Schools encourages promotion of all children's unique capabilities and interests, stipulating that teachers can "use this knowledge to build curricula and interactions to proactively promote inclusive principles" (DoE, 2023, p.32). As a result, teachers have increased opportunities to enhance the authenticity and accessibility of learning experiences by aligning curricular content with children's interests (Robertson & Padesky, 2020; Touhill, 2012). Moreover, interest-based learning aligns with endeavours to engage children in decision making, aiming to increase autonomy and active participation in learning (NCCA, 2023a).

Although interest-based learning may at first seem an individualistic approach, it aligns with core principles of UDL by drawing attention to learner variability whilst providing opportunities for flexible content delivery, choice and enhanced accessibility

(Lohmann, 2023; Zhang et al., 2022). Infusing children’s interests into learning experiences can provide multiple means of representation, engagement and expression (Lohmann, 2023; Ring & O’ Sullivan, 2021). In this way, interest-based approaches may offer the catalyst to improve educational outcomes for Autistic children, and ensure that meaningful inclusion is not only an ideal, but a reality in our schools.

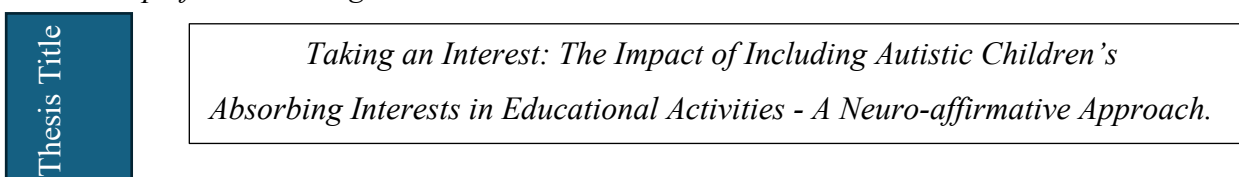
1.4 Conclusion and Thesis Overview

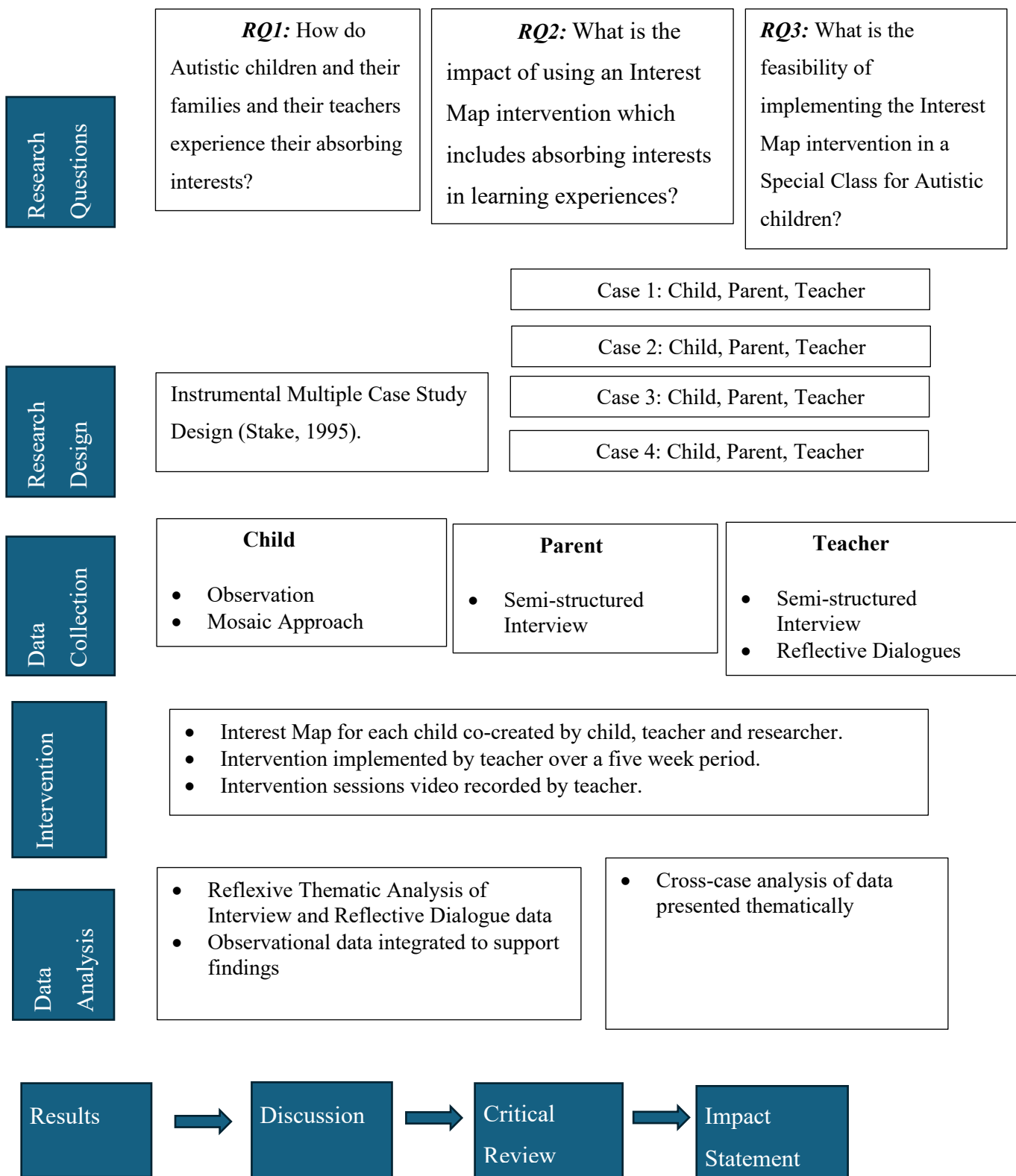
It is evident that understandings of Autism have evolved in recent decades and so too has the policy and practice context in relation to inclusion of Autistic children in education. The current research understands Autism within a neuro-affirmative lens and conceptualises inclusion as a sense of belonging in a setting whereby children’s needs are affirmed and supported. The researcher proposes that meaningful inclusion of Autistic children can be facilitated using strengths-based approaches such as interest-based learning, which can be adapted to cater for both the heterogeneity of Autistic presentations and diversity of educational contexts and settings.

Focusing on understanding absorbing interests as a core feature of an Autistic experience of the world and exploring the ways in which absorbing interest are incorporated into learning experiences, Chapter Two presents a systematic review of the literature underpinning the current research by critically appraising and synthesising findings in relation to the research topic. This chapter concludes with a rationale for the current research and presents an overview of the aims and research questions. Moving on from this, Chapter Three describes the empirical study, documenting the research methodology and justifying the choice of methods. Data collection and data analysis approaches are described and results are synthesised and interpreted in light of the research questions and extant literature. Finally, Chapter Four provides a critical review of the research and considers the implication of the research findings for educational psychology policy and practice, whilst acknowledging the limitations of the study and offering recommendations for future research. An overview of the thesis design and methodology is provided in Figure 1.1.

Figure 1.1

Visual Map of Thesis Design





Chapter 2: Literature Review

2.1 Chapter Overview

This chapter provides an overview of the literature underpinning this research. It begins by exploring absorbing interests as a core feature of an Autistic experience of the world, considering the theoretical context of monotropism and the evolution of understanding of absorbing interests. Thereafter, the literature exploring the benefits of absorbing interests and the impact of absorbing interest-based interventions on Autistic children's outcomes will be systematically reviewed, appraised and synthesised. The chapter concludes with a rationale for the current study and presents the aims and research questions which seek to address gaps in the evidence base.

2.2 Absorbing Interests in Autism

Autism is a neurotype characterised by differences in social communication and sensory processing domains, as well as differences in patterns of behaviour and interest (APA, 2022). Patterns of behaviour described as being “restricted or repetitive” within DSM-V-TR are often expressed in Autism through differences in motor movements, use of objects or speech; preference for sameness or adherence to routines; and hypo- or hyper-reactivity to sensory stimuli (APA, 2022). Also included within this diagnostic criterion are intense interests in particular aspects of objects, as well as intense preoccupation with certain topics or activities (APA, 2022). These areas of interest often lead to islets of expertise in particular topics, commonly referred to as “special interests”.

Terminology within the literature referring to special interests also includes “restricted interests”, “perseverative interests”, “intense interests” and “circumscribed interests”. The current research seeks to understand Autistic experiences through a neuro-affirmative lens, including the conceptualisation of Autism as a different yet valued way of thinking and perceiving. In doing so, it hopes to reframe the “restricted interests” of Autistic individuals as a core component of their experience of the world (Tansley, Parsons & Kovshoff, 2022). As such, the term “absorbing interests” (Winter, 2012) was chosen as a non-pejorative, neuro-affirmative term to capture the intensely absorbing nature of Autistic individuals' special interests which often “provide the lens through which they view the world” (Winter-Messiers, 2007, p.142). Absorbing interests are conceptualised based on the definition proposed by the National Autistic Society (NAS), which describes absorbing interests as

deeply focused thinking, very strong passions and dedicated interests in specific subjects (NAS, n.d.).

Despite accepting that the Autistic experience is non-universal, research proposes that between 65-95% of Autistic individuals have at least one absorbing interest (Grove, Roth & Hoekstra, 2018; Nowell et al., 2021; Turner-Brown et al., 2011). The average age at which absorbing interests emerge is approximately five years old (Nowell et al., 2021), however many Autistic children appear to develop absorbing interests at an earlier age. Although topics of absorbing interests may change over time, the tendency towards having intense interests typically remains (Porter, 2012). There appears to be no gender difference in intensity, frequency or motivation to engage in absorbing interests among those who have identified absorbing interests (Grove, Roth & Hoekstra, 2016). However, research suggests that there is greater prevalence of absorbing interests amongst Autistic males than females (Bourson & Prevost, 2024; Brown et al., 2024a; Grove, Roth & Hoekstra, 2016). Absorbing interests of Autistic girls tend to be more closely aligned with neurotypical topics than those of Autistic boys (Bourson & Prevost, 2024; Spackman et al., 2023), as well as being more likely to contain a social component (Spackman et al., 2023). This may be explained by greater tendencies towards masking or camouflaging in Autistic girls, whereby aspects of oneself deemed “socially undesirable” are concealed to fit in with social norms (Gordon, Fox & Asbury, 2024). Masking of absorbing interests may manifest through reluctance to share information or reticence to engage in less normative areas of interest in some settings (Bross, Huffman & Hagiwara, 2022; Brown et al., 2024a; Halsall, Clarke & Crane, 2021). In addition, it is possible that tools to measure absorbing interests do not fully capture the expression of absorbing interests in Autistic girls (Brown et al., 2024a). Notably, as well as some gender-related differences, the nature of absorbing interests also appears to vary based on cognitive ability (Spackman et al., 2023). Individuals with lower levels of cognitive ability appear to engage in more object or sensory-oriented interests whilst higher levels of cognitive ability are more associated with topic-specific interests (Anthony et al., 2013; Nowell et al., 2021; Spackman et al., 2023).

Absorbing interests differ from neurotypical interests in that they function as more than hobbies for Autistic individuals and appear to provide a way to make sense of the world (Lung et al., 2024). Absorbing interests tend to impact engagement with daily activities, due to the high levels of intensity with which they are often pursued (Anthony et al., 2013; Nowell et al., 2021). Although absorbing interests can manifest in similar ways to

compulsive, obsessive behaviours, such as organising interest-related items in particular ways and using repetitive scripted speech associated with topics of interest, unlike the anxious, unpleasant quality associated with most obsessive, compulsive behaviours, absorbing interests tend to evoke positive emotions (Long, Cooper & Russell, 2024).

In terms of content, absorbing interests are largely heterogenous in nature (Nowell et al., 2021). Some align with topics considered “typical” and “developmentally appropriate”, including video games, music, transportation, popular characters and movies (Grove, Roth & Hoekstra, 2016; Harrop et al., 2019). However, absorbing interests can also be idiosyncratic, including interests in industrial fans, dust, elevators or electricity pylons (Winter-Messiers, 2007), as well as hyperlexia which is characterised by intense precocious preoccupations with written material, along with advanced decoding abilities that exceed the individual’s level of reading comprehension (Ostrolenk et al., 2024). Parents of Autistic children often highlight concerns about the social acceptability of the nature or intensity of an absorbing interest, (Davey, 2020; Winter-Messiers, 2007). Higher ratings of interference with functioning are reported by parents when absorbing interests are perceived as unique or atypical (Nowell et al., 2021; Spackman et al., 2023) and more negative descriptions of absorbing interests are often associated with modalities of engagement considered maladaptive (Brown et al., 2024b; Gass, 2013). However, this conceptualisation of interests as “normal” and “abnormal” may be arbitrary based on neuro-typical norms. As well as a diverse range of topics, Autistic individuals appear to have a variety of preferred activities and modalities of engagement associated with their absorbing interests. These include collecting objects, researching information, engaging in creative activities, discussing facts, engaging in particular patterns of play and forming strong attachments to objects linked with their absorbing interest (Brown et al., 2024b; Spiker et al., 2012).

2.3 Monotropism

Absorbing interests are underpinned by monotropism, a divergent cognitive style involving the tendency to focus intently on one stimulus to the exclusion of others (Murray, 2018; Murray, Lesser & Lawson, 2005; Woods & Waltz, 2019). Monotropism conceptualises Autistic cognition based on interest systems and “attention tunnels”, whereby an individual’s attention resources are limited and their attention is guided by their interests (Murray, 1992; Woods & Waltz, 2019). Monotropism differs from polytropism, the cognitive style commonly experienced by neurotypical individuals, which is the ability to divert attention to numerous stimuli and interests simultaneously, and adapt preferences according to external

influences (Milton et al., 2020). In contrast, monotropic cognition can result in “hyper-awareness within the attention tunnel”, as attention is allocated at high levels of intensity to one particular topic, activity or stimulus, thus causing individuals to tune out from other aspects of their environment (Murray, Lesser & Lawson, 2005, p.142).

As a theory, monotropism illuminates traits often associated with Autism, such as uneven skills profiles; hyper- and hypo- sensitivity to sensory aspects of the environment; attention to detail, as well as Autistic inertia, a term used to refer to difficulties task-switching and transitioning between activities (Murray, 2018; Murray, Lesser & Lawson, 2005; Woods & Waltz, 2019). Although it has been critiqued for having less empirical evidence to date than alternative theories of Autism, monotropism has been recognised for reflecting the priorities and experiences of the Autistic community (Garau et al., 2023). Moreover, monotropism offers a strengths-based perspective (Murray, 2018; Milton et al., 2020), contrary to the pathologisation of Autistic cognition and processing preferences within many dominant theories of Autism (Garau et al., 2023), such as Weak Central Coherence (Briskman, Happé & Frith, 2001) and Executive Dysfunction Theory (Pennington & Ozonoff, 1996).

2.4 Evolving Understandings of Absorbing Interests

2.4.1 Absorbing Interests as Fixations and Obsessions

Absorbing interests were first described by Kanner (1943), who noted that one of his clients had “one special interest which will completely dominate his day’s activities. He talks of little else while the interest exists, he frets when he is not able to indulge in it” (p. 233). Similarly, Asperger (1944, 1991) observed the phenomenon in children, noting that “a special interest enables them to achieve quite extraordinary levels of performance in a certain area” (p.45).

Although the benefits of absorbing interests in allowing individuals to direct their attention to particular areas in a focused manner are widely recognised (Silberman 2015), perceptions of absorbing interests as socially inhibiting obsessions that significantly interfere with learning, development and family functioning have also been documented (Boyd et al., 2011; Winter-Messiers et al., 2007). This perspective of absorbing interests as “fixations” aligns with stigmatising, deficit-based views of Autism and gives rise to terminology with negative connotations such as “restricted” and “circumscribed” (Baron-Cohen & Wheelwright, 1999). Research subsequently purported associations between absorbing

interests and behavioural challenges, including rigidity, irritability and aggression (Boyd et al., 2011). As a result, there was a focus on expanding the child's behavioural repertoire (Boyd et al., 2011) and reducing patterns of behaviours and interests characterised as being "restricted and repetitive" (Boyd, McDonough & Bodfish, 2012), using both pharmacology and behavioural approaches. Such approaches include response interruption and redirection techniques, which involve using physical and verbal prompts to redirect children engaging in behaviours such as stimming and vocal stereotypies (Boyd et al., 2011). Another related approach is differential reinforcement of variability whereby children are taught to engage in non-repetitive ways with interest-based and novel stimuli (Boyd et al., 2011). Although now commonly understood as being harmful, these practices may still inadvertently be in place in certain educational settings, such as redirecting children from engaging with their absorbing interests to promote completion of prescribed curricula (Gunn & Delafield-Butt, 2016).

2.4.2 A Behaviourist Approach

Moving on from this, research focused on using absorbing interests in a consequence-based manner, whereby access is provided contingent on the occurrence of target behaviours, and absorbing interests are used as reinforcers for "good behaviour" and compliance (Charlop-Christy & Haymes, 1998). Absorbing interests may also be withheld as punishment for behaviours that challenge. Consequence-based approaches draw on extrinsic motivation by incentivising individuals to complete an unpreferred activity with the promise of obtaining a preferred reward. Although some research demonstrates increased target behaviours and decreased behaviours that challenge when absorbing interests are used as reinforcers (Charlop-Christy & Haymes, 1998), consequence-based approaches appear to be less effective over time. This may be because the activity itself remains unpreferred and thus, learning can be superficial as the child's main focus is on accessing their absorbing interest. Moreover, restricting absorbing interests by allowing contingent access may be distressing for the child, as sudden disruptions to monotropic flow states can be highly disorientating (Murray, 2018; Winter-Messier et al., 2007; Woods & Waltz, 2019). Similarly, Autism advocates emphasise the damaging effects of framing Autistic behaviours, interests and preferences as "problematic" and of encouraging Autistic individuals to conform to neurotypical behaviours and norms (Cleary et al., 2023). A "within-child" perspective dominates the aforementioned approaches which focus on using absorbing interests as a mechanism for promoting "socially desirable" behaviours (Tansley, Parsons & Kovshoff, 2022). Such practices promote camouflaging or masking which research has shown is

detrimental to Autistic individuals' identity and associated with Autistic burnout and mental health challenges (Cleary et al., 2023; Evans, Krumrei-Mancuso & Rouse, 2024).

2.4.3 A Neuro-affirmative Approach

More recently, many researchers and practitioners strive to use strengths-based approaches when supporting Autistic individuals. In line with the Neurodiversity Paradigm, such interventions “prioritise the dignity, autonomy and interests of the Autistic person” (Lung et al., 2024, p.2), whilst attending to individual support needs. This includes a diversion from viewing absorbing interests as something to ameliorate or control (Tansley, Parsons & Kovshoff, 2022), instead considering the benefits of monotropism as a nuanced and divergent cognitive style (Davey, 2020; Woods and Waltz, 2019; Wood 2023). This reframes the notion of “restricted interests” to conceptualise intense interests more constructively (McDonnell & Milton, 2014). Rather than trying to restrict Autistic children’s absorbing interests, educators can become part of the attention tunnel associated with monotropic focus (Birtwell, Platner, & Nowinski, 2019; Murray, 2018). As a result, research seeks to explore how absorbing interests can be embedded and woven into learning environments to support Autistic children using strengths-based approaches that align with inclusive educational practice (Lanou, Hough & Powell, 2012; Ninci et al., 2019).

2.5 Overview of Absorbing Interest-Based Interventions

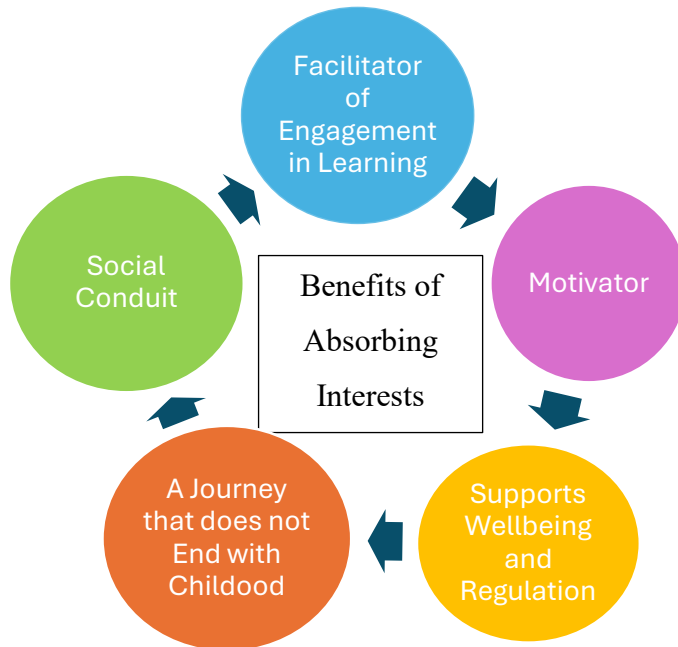
Across the evidence-base, there is a range of methods for including absorbing interests in educational settings. Interest-based interventions appear to be most commonly facilitated within the children’s classroom or in the playground (Tansley, Parsons & Kovshoff, 2022). Such interventions focus on outcomes including improving Autistic children’s interactions with peers, increasing joint attention, following adult directives and engaging in on-task behaviour (Dunst, Trivette & Hamby, 2012; Tansley, Parsons & Kovshoff, 2022). Antecedent-based approaches integrate absorbing interests into materials and learning tasks (Davey, 2020). In contrast to aforementioned consequence-based approaches which draw on extrinsic motivation, antecedent-based approaches capitalise upon the intrinsically motivating nature of the interest itself. For example, dinosaurs may be incorporated into maths problems for a child with an absorbing interest in dinosaurs, or a child may be given prompts relating to their absorbing interest in writing tasks (Gunn & Delafield-Butt, 2016; Sivertson, 2010). Absorbing interests can also be incorporated into materials such as visual schedules and social stories to enhance their utility. Relatedly, many

practitioners have implemented the Power Card strategy, which involves using a card and script including a character associated with the child's absorbing interest to teach a target behaviour (Gagnon, 2001; Lanou, Hough & Powell, 2012; Spencer et al., 2008). This script typically describes the character resolving a situation using the target behaviour or skill (Gunn & Delafield-Butt, 2016). Other antecedent-based approaches include clubs designed around the child's absorbing interest to promote social communication with peers (Koegel et al., 2012) and using absorbing interests as a stimulus to explore cross-curricular topics (Davey, 2020). Research shows that antecedent approaches are deemed preferable in promoting long-term positive outcomes, and in mitigating issues of ethicality associated with consequence-based approaches (Brown & Stanton-Chapman, 2015; Gunn & Delafield-Butt, 2016).

Notably, there are varying results in relation to the effectiveness of embedding absorbing interests in interventions (Grove et al., 2018). Some research found that embedding absorbing interests in educational interventions is not always associated with improved outcomes (Ninci et al., 2019). Moderating factors appear to include features of the learning context, such as the nature of the task and the level of teacher demands, as well as individual support needs (Ninci et al., 2019). Marshall and Myers (2021) found that simply embedding Autistic students' absorbing interests in reading texts does not correspond with improved reading comprehension amongst Autistic adolescents. This study hypothesised that potential confounding variables included the child's age, the severity of their reading difficulties and existence of co-occurring diagnoses (Marshall & Myers, 2021). Some studies report negative outcomes associated with absorbing interests such as maintaining social interaction difficulties (Klin et al., 2007), contributing to functional difficulties (Turner-Brown et al., 2011), increasing anxiety (Spiker et al., 2012) and inhibiting engagement. In addition, there appears to be variability in maintenance and generalisation of effects (Harrop et al., 2019). Despite these findings, a larger proportion of research advocates for the benefits associated with embedding absorbing interests in educational interventions and learning activities (Davey, 2020; Dunst, Trivette & Hamby, 2012; Gunn & Delafield-Butt, 2016; Harrop et al., 2019; Winter-Messiers et al., 2007; Wood, 2023) (Figure 2.1).

Figure 2.1

The Benefits of Absorbing Interests



2.6 Benefits of Absorbing Interests

2.6.1 Absorbing Interests as a Facilitator of Engagement in Learning

Research shows that natural curiosity associated with absorbing interests ignites learning opportunities for Autistic children and facilitates development of skills across curricular areas and settings (Davey, 2020; Gunn & Delafield-Butt, 2016; Wilson et al., 2017; Winter-Messiers, 2007). Previous research noted gains in academic skills including reading fluency and comprehension (El Zein et al., 2016), motivation to write (Sivertson, 2010), increased recall of learned facts and enhanced performance in maths activities (Huffman, 2017; Mancil & Pearl, 2008). Absorbing interests have been incorporated in strategies to promote self-monitoring in writing activities, resulting in increased productivity and task completion (Lanou, Hough & Powell, 2012). Davey (2020) noted that there was an improvement in both the quality and quantity of children’s work when tasks revolved around their absorbing interests. This may be because children can rely on prior knowledge associated with their interest and feel confident applying this information in novel ways (Taylor et al., 2025). Some studies demonstrated maintenance effects post-intervention, as performance gains were sustained even when the activity no longer included the absorbing interest (Davey, 2020; Huffman, 2017).

To this end, enhanced engagement and levels of perseverance related to absorbing interests may be harnessed to support Autistic individuals in navigating activities and classroom routines typically perceived as challenging (Mancil & Pearl, 2008). This “tapping into strengths to support challenges” (Donaldson, Krejcha & McMillin, 2017, p.59) approach underpins the incorporation of absorbing interests into interventions that aim to build capacities in areas of difficulty for Autistic individuals (Mancil & Pearl, 2008; Winter-Messiers et al., 2007). This is exemplified in Lanou, Hough and Powell (2012) who capitalised on a child’s absorbing interest in the Titanic to facilitate social learning and perspective taking. In this study, the analogy of an iceberg colliding with the Titanic was used to create a visual reminder about respecting other’s personal space (Lanou, Hough & Powell, 2012).

2.6.2 Absorbing Interests as a Motivator

Motivation appears to be an important component in facilitating enhanced learning and engagement, as pursuit of absorbing interests involves significant child-led, self-

motivated learning (Gunn & Delafield-Butt, 2016). Autistic individuals appear to be more intrinsically motivated to engage in interest-based activities than their non-Autistic peers (Birtwell, Platner, & Nowinski, 2019; Grove, Roth & Hoekstra, 2016). Based on findings elucidated by a study that developed the “Special Interest Motivation Scale”, absorbing interests may be more effective reinforcers than praise, achievement or rewards for Autistic individuals (Grove, Roth & Hoekstra, 2016). Therefore, embedding absorbing interests in tasks and activities provides opportunities for their compelling nature to be capitalised upon (Baker, 2000). Research proposes that increased motivation associated with absorbing interests leads to sustained engagement, reduced off-task behaviour, decreased teacher prompting and improved performance (Gunn & Delafield-Butt, 2016).

2.6.3 Absorbing Interests and Wellbeing

Absorbing interests are considered to be central to well-being and self-efficacy (Murray, 2018; Harrop et al., 2019). Absorbing interests appear to be of importance to the Autistic person in asserting their place in the world (Winter-Messiers, 2007). As absorbing interests are thought to be “inextricably entwined with Autistic individuals’ self-image” (Winter-Messiers, 2007, p.144), it is understood that “bringing the child’s absorbing interest into the classroom brings the child into the classroom” (Gunn & Delafield-Butt, 2016, p.34). Research proposed that including a child’s absorbing interest in learning enhances their self-esteem, as it instils a sense of belonging and makes them feel valued (Davey, 2020). In addition, Autistic children often demonstrate precocious knowledge relating to their absorbing interest (Baron-Cohen & Wheelwright, 1999; Winter-Messiers, 2007). This can result in greater perceived self-efficacy and increased confidence engaging with their absorbing interest (Gass, 2013; Winter-Messiers, 2007). Absorbing interest-based activities appear to be correlated with positive emotions including happiness, pride and enthusiasm (Winter-Messiers, 2007), which may be underpinned by opportunities to demonstrate expertise (Gunn & Delafield-Butt, 2016).

In addition, monotropic thinking enables Autistic individuals to impose predictability within their environment, thus facilitating sensory and emotional regulation (Lung et al., 2024; Murray, 2018). The flow state associated with absorbing interests appears to act as a coping mechanism for some Autistic individuals, supporting regulation in stressful, uncertain or anxiety-provoking situations (Boucher, 2022; Lung et al., 2024; Winter-Messiers, 2007). Winter-Messiers (2007) suggests that absorbing interests may support Autistic children in

navigating environments designed for neurotypical sensory processing systems, as participants appeared to have greater tolerance for sensory stimuli when engaging with their absorbing interests.

2.6.4 Absorbing Interests as a Social Conduit

Research suggests that absorbing interests support interactions with others and therefore act as a facilitator of social engagement for Autistic individuals (Gass, 2013). The desire to convey and share their passion for absorbing interests can support Autistic individuals to navigate situations which may otherwise prove challenging, such as initiating social interactions and sustaining conversations with others (Davey, 2020; Tansley, Parsons & Kovshoff, 2022). There is some evidence supporting the embedding of Autistic children's preferred interests within games to promote development of pretend play and interaction skills (Timmins, 2014), facilitate social play and enhance reciprocal relationships with siblings (Baker, 2000).

Benefits associated with absorbing interests extend beyond the remit of social interaction to wider social communication skills. Winter-Messier et al. (2007) reported greater ease in communication when participants talked about their absorbing interest, including broader vocabulary, improved fluency and enhanced elaboration in conversation, as well as increased positive affect and enthusiasm. Similarly, Davey (2020) noted marked improvements in spoken language and enhanced relationships with supportive adults when absorbing interests were included in educational activities. Social communication gains appear to extend to children with varying support needs, as Vismara and Lyons (2011) reported increased joint attention initiations and task engagement when absorbing interests were used to facilitate opportunities for social sharing between pre-verbal Autistic children and their caregivers. This unveils potential for absorbing interests to provide authentic opportunities for meaningful interactions and support development of social relationships.

2.6.5 A Journey that Does Not End with Childhood

Positive outcomes associated with absorbing interests appear to extend into adulthood as many Autistic people link their absorbing interest with further education and employment opportunities, as well as with extra-curricular activities, thus facilitating a sense of community belonging and increased participation in society (Bross, Huffman & Hagiwara, 2022; Lizon, Taels & Vanheule, 2024; Winter-Messiers, 2007). This narrative is reiterated in auto-biographical accounts and reports of Autistic adults who highlight the central role of absorbing interests in their lives and implore that absorbing interests be societally supported (Grandin & Panek, 2013; Lizon, Taels & Vanheule, 2024; Long, 2024; Patten-Koenig & Hough-Williams, 2017).

2.7 Rationale for the Current Review

Evidently, there appear to be many benefits of embedding interests in learning experiences to support Autistic individuals in developing skills across adaptive functioning, communication, play and social interaction domains. This is substantiated by systematic reviews and meta-analyses conducted around this topic (Dunst, Trivette & Hamby, 2012; Gunn & Delafield-Butt, 2016; Harrop et al., 2019; Ninci et al., 2019; Nowell et al., 2021). However, there are limitations associated with some existing reviews, including lack of clarity around the quality appraisal criteria used and issues with internal validity due to inconsistent definitions of what constitutes an absorbing interest, as well as some variability in findings across included studies (Ninci et al., 2019; Nowell et al., 2021). Given this variability, the current systematic review explores the range of absorbing interest-based interventions implemented, aiming to establish the setting and types of intervention and interventionalists which are most conducive to positive outcomes. In doing so, it hopes to elucidate the environmental factors and teaching and learning strategies which support an efficacious, positive experience of interest-based learning for Autistic children in primary school. The purpose of this review is to elucidate how absorbing interests are incorporated into interventions, considering both their impact on Autistic children's outcomes and the feasibility of their implementation, addressing the following research questions:

2.8 Review Questions (RQ)

RQ1: How are absorbing interests incorporated into interventions for Autistic primary school-aged children?

RQ2: What is the impact of absorbing interest-based interventions on Autistic primary school-aged children's outcomes?

RQ3: What is the feasibility and accessibility of implementing absorbing interest-based interventions with Autistic primary school-aged children?

2.9 Systematic Literature Review

A comprehensive literature search was undertaken in August 2024 using Academic Search Complete, PsychInfo, Psych Articles, Education Source and ERIC databases which were consulted due to their relevance in the field of educational psychology. Specific search terms were selected based on the review questions and information derived from scoping searches (Table 2.1).

Table 2.1

Search Terms

Autism OR Asperger* OR "Autism Spectrum Disorder" OR ASD OR Autistic OR
Autism Spectrum" OR ASC

"Special Interests" OR "Perseverative interest" OR "Intense Interest" OR "Circumscribed
Interest" OR "Absorbing Interest" OR "Restricted Interest" OR "Repetitive Interest"

These search terms were used to systematically identify literature using the chosen databases and yielded 101 papers, with 42 papers remaining once duplicates had been removed. An initial title and abstract screening was conducted to eliminate papers that did not align with inclusion and exclusion criteria (Table 2.2). During this stage, 29 articles were removed. The remaining 13 papers were downloaded for full text screening and assessed against inclusion and exclusion criteria. A further six papers were removed, resulting in seven papers being included in the review. Citation chaining was used to search for relevant articles referenced in included papers. One additional paper was found. Finally, a hand-search conducted on Google Scholar yielded three papers which met inclusion criteria. A Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart provides a visual map of the search strategy (Page et al., 2021) (Appendix A). A list of included and excluded studies is also provided (Appendix B & C). It was noted that many studies included in this review were also identified for inclusion in previous systematic reviews (Dunst,

Trivette & Hamby, 2012; Gunn & Delafield-Butt, 2016; Harrop et al., 2019; Ninci et al., 2019), suggesting reliability of the search strategy employed. Key characteristics of the 11 included studies are outlined in Appendix D.

Table 2.2*Inclusion and Exclusion Criteria*

| Criteria | Inclusion | Exclusion | Rationale |
|------------------------|--|---|---|
| 1. Type of Publication | Peer-reviewed journal articles. | Non peer-reviewed articles, meta analyses, systematic reviews, grey literature. | Peer-reviewed papers have been independently assessed for quality. Systematic reviews and meta-analyses are beyond the scope of the current research. |
| 2. Language | Papers written in English. | Papers not written in English. | The researcher speaks English and translation services are not available. |
| 3. Participants | Papers including Autistic primary school-aged children (4-13 years). | Papers including children without an Autism diagnosis. Papers whereby the majority or all participants are from preschool, secondary school or adult populations. | The current research pertains to the experiences of Autistic primary school-aged children. |
| 4. Timeframe | Papers published between 2010-2024. | Papers published before 2010. | The current research is interested in the most up-to-date research findings. |
| 5. Intervention | Studies including absorbing interest-based interventions. | Studies without absorbing interest-based interventions. | The current research pertains to absorbing interest-based interventions. |

2.9.1 Critical Appraisal of Studies for Quality and Relevance

The Gough (2007) Weight of Evidence (WoE) framework was used to facilitate systematic critical appraisal of the methodological and conceptual quality of included studies. The WoE framework consists of three quality features (WoE A, B, C) which are averaged to calculate an overall quality indicator (WoE D) (Table 2.3).

Table 2.3

Overview of Weight of Evidence

| Weight of Evidence A | Weight of Evidence B | Weight of Evidence C | Weight of Evidence D |
|---|---|--|--|
| Methodological quality of the evidence evaluated based on quality standards for studies of that type. | Methodological appropriateness of the evidence in addressing the specific review questions. | Relevance of the evidence to the review questions. | Overall quality indicator, considers the extent to which the study addresses the review questions. |

The methodological quality (WoE A) of the studies was evaluated using criteria suited to the specific design of each study, including the Critical Appraisal Skills Programme (CASP, 2018) to critique qualitative studies and Horner et al. (2005) quality indicators for single-subject research (Appendix E). In the absence of a “gold standard critical appraisal tool”, these criteria were chosen as they align with the scope of the review and are reported to be reliable and rigorous within the literature (Long, French & Brooks, 2020; Wendt & Miller, 2012). Nonetheless, there are limitations associated with these tools, including risk of bias and subjectivity in appraisal, whereby the researcher’s experiences may influence how the tool is interpreted and thus reflexivity is required throughout the appraisal process (Newton et al., 2012). The relevance of the methodology (WoE B) to the review question was evaluated using a Typology of Evidence (Petticrew & Roberts, 2003) (Appendix E). This approach considers methodological appropriateness by aligning research designs with particular types of research questions. The assumption of a hierarchy of particular designs is avoided; rather this approach acknowledges that the interpretation of valid and robust evidence differs based on its appropriateness to specific research questions (Clark, Draper & Taylor, 2018; Glasby,

Walshe & Harvey, 2007). The relevance of evidence in each study to the current review questions (WoE C) was assessed using criteria devised by the author based on the Population, Intervention, Context, Outcome (PICO) Framework (Richardson et al., 1995) (Appendix E).

The scores for WoE A, B, and C were averaged to calculate WoE D for each study and possible scores were divided into triads of high (2.2-3.0), medium (1.7-2.1) and low (0.0-1.6) (Appendix E). WoE ratings influence the extent to which papers are subsequently discussed, thus ensuring that greater weighting is given to higher quality papers and those which align more closely with the review questions. The studies were critically appraised according to participants, design and data analysis.

2.9.1.1 Participants. Studies included in this review have small sample sizes of between one and ten participants. This was deemed appropriate given the qualitative case study and single-subject research designs employed across the majority of included studies, whereby the focus remains on generating deep, nuanced data rather than achieving generalisability (Boddy, 2016). Nonetheless, small sample sizes may suggest the need for additional research to replicate effects cited by these studies. Children included in the studies ranged between four and ten years which is in keeping with inclusion criteria. There appears to be a gender imbalance in participants, with only three girls participating across 11 studies. This perhaps reflects the common themes of androcentricity within the wider evidence-base around Autism (Chester, 2019), as well as common trends of underdiagnosis and misdiagnosis of Autistic girls in clinical practice (Cook, Hull & Mandy, 2024). Inclusion of female participants is of interest for further research around this topic given that female Autistic individuals may engage with absorbing interests in different ways (Sutherland et al., 2017). Some studies also included parents, teachers and para-professionals as participants (Jung & Sainato, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023; Wood, 2023), with one study also including a school psychologist (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Demographic information on teacher and parent participants was typically limited to age and gender. Two studies also included non-Autistic peers in interventions relating to socialisation (Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018). Interestingly, Wood (2023) recruited a sample of ten Autistic adults to provide insights into their experience of education in primary school and their understandings of Autism.

A strength of included studies is the reporting of comprehensive demographic information about participants, including details about their class level, Student Support Plan (SSP), classroom routines, learning abilities, social communication differences and

behaviours (Carnett et al., 2014; El Zein et al., 2016; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Porter, 2012; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). This thick description of participants and context strengthens the contribution of the findings within the field. In contrast, a limitation of some studies is the absence of information on participants or sampling methods (Stallings, 2022) or the provision of basic demographic information (Kryzak & Jones, 2015; Wood, 2023) which may impact the applicability of findings. Although all studies included Autistic children, there were varying levels of detail regarding the Autism assessment, such as the setting in which the child's assessment was completed (Porter, 2012; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023) or the child's age when they were identified as Autistic (Campell & Tincani, 2011; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Porter, 2012). Some studies reported standardised measures to assess children's cognitive and language abilities (Campell & Tincani, 2011; Jung & Sainato, 2015; Porter, 2012), social communication differences (Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015) and adaptive functioning (Koegel, Oliver & Koegel, 2018). Other studies relied on qualitative information to determine children's strengths and needs profiles, including interviews with parents and teachers and observations of children in school (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023; Wood, 2023).

Participants had a wide variety of absorbing interests including music, Roblox, Ninja Turtles, jigsaw puzzles, Super Mario, trains and cars, many of which align with interests considered to be "neurotypical" but differ in their level of intensity. Notably, no evidence of idiosyncratic interests was reported across included studies. Construct validity was enhanced in studies that appropriately operationalised absorbing interests as a concept. A range of methods was employed to identify children's absorbing interests including free operant preference assessments (Carnett et al., 2014), observation (Daubert, Hornstein & Tincani, 2015; Jung & Sainato, 2015) and information gathered from surveys and interviews with children and parents (Carnett et al., 2014; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Four studies used a combination of these methods, thus increasing data triangulation and enhancing internal validity (Campell & Tincani, 2011; El Zein et al., 2016; Koegel, Oliver & Koegel, 2018; Kryzak & Jones, 2015). Two studies did not provide detail on children's absorbing interests or how they were identified (Porter, 2012; Wood, 2023). Although all studies included some information on the children's absorbing interests, few sought to gain perspectives of the children, parents and teachers on the experience or impact of their absorbing interests. Rather, the role of parents and teachers was limited to providing

background information on children's strengths and needs, identifying their absorbing interest, and in some studies, providing social validity data (Jung & Sainato, 2015). In one study, information was gathered directly from Autistic children pertaining to identification of their absorbing interest and review of the intervention (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Koegel, Oliver and Koegel (2018) elicited more detailed information from the children about their absorbing interests, such as preferred activities relating to their absorbing interest. Similarly, Wood (2023) facilitated semi-structured interviews with teachers, para-professionals and children to elicit perspectives on the advantages and disadvantages associated with absorbing interests, as well as around general inclusive practices and supports that benefit Autistic children. Inclusion of the Autistic voice generated rich qualitative data and increased the validity and authenticity of these findings (Kaplan-Kahn & Caplan, 2023).

Purposive sampling appeared to be used across all studies in the review. This is deemed appropriate within special education research, as researchers aim to select participants with specific characteristics or experiences relevant to the study. The degree to which the recruitment strategy employed was described varied between studies, ranging from minimal information around school personnel referring participants to the study based on an identified need or concern (Carnett et al., 2014; Koegel, Oliver & Koegel, 2018), to providing no detail on sampling (Porter, 2012; Wood, 2023). Conversely, other researchers described a comprehensive list of inclusion criteria which formed the basis for screenings completed by researchers (Kryzak & Jones, 2015), or which were considered by teachers when selecting children to participate (Campbell & Tincani, 2011; El Zein et al., 2016; Jung & Sainato, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Campbell and Tincani (2011) also carried out teacher interviews and classroom observations to confirm that children selected met their inclusion criteria to mitigate the risk of selection bias in sampling.

Interventionalists varied across studies, with researchers implementing interventions in five studies (Carnett et al., 2014; El Zein et al., 2016; Jung & Sainato, 2015; Kryzak & Jones, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023), whilst teachers were trained to implement interventions in four studies (Campbell & Tincani, 2011; Daubert, Hornstein & Tincani, 2015; Koegel, Oliver & Koegel, 2018; Wood, 2023). In Porter (2012), the researcher identified herself as the child's mother, a relationship which may have resulted in researcher bias. Stallings (2022) identified limitations associated with her dual role as researcher and practitioner in terms of potential for clinical biases and assumptions

influencing the findings. A greater degree of reflexivity in these studies may have helped to mitigate such factors.

Five studies were carried out in a special class (Campbell & Tincani, 2011; Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023), whilst four studies took place within mainstream settings (El Zein et al., 2016; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Wood, 2023), and two studies were based in the home (Kryzak & Jones, 2015; Porter, 2012). The settings were described with replicable precision in four of the eleven papers (Campbell & Tincani, 2011; Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015; Jung & Sainato, 2015).

2.9.1.2 Research Design. Eight studies incorporated single-subject research designs including alternating treatment (Carnett et al., 2014; El Zein et al., 2016; Koegel, Oliver & Koegel, 2018), multiple-probe across participants (Daubert, Hornstein & Tincani, 2015; Jung & Sainato, 2015; Kryzak & Jones, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023) and multiple-baseline across participants designs (Campbell & Tincani, 2011). These studies incorporated baseline and intervention phases, with some also including maintenance and generalisation phases post-intervention (Campbell & Tincani, 2011; Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015; Jung & Sainato, 2015; Kryzak & Jones, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). A qualitative design was employed in three studies (Stallings, 2022; Porter, 2012; Wood, 2023). Porter (2012) carried out a descriptive case study, enabling the researcher to gain insights into the role of absorbing interests in an applied setting, which is important to the current research topic (Crowe et al., 2011). Stallings (2022) explored the use of absorbing interests as a mode of intervention in art therapy through retrospective observation of pre-existing data. Similarly, Wood (2023) considered the benefits of absorbing interests as a mode of intervention in an educational context.

Comprehensive descriptions of the research design and methodologies employed and detailed operationalisation of dependent variables enhanced the external validity and replicability of findings (Campbell & Tincani, 2011; Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015; El Zein et al., 2016; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Kryzak & Jones, 2015; Stallings, 2022; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). In contrast, other studies neglected to provide sufficient detail on the design or data collection methodologies, thus influencing the validity of findings (Porter, 2012; Wood, 2023). Moreover, Porter (2012) did not clearly define the case within carefully formulated research

questions and extant literature, as recommended in best practice for case study research (Crowe et al., 2011).

Potential bias in data collection and issues with implementation integrity were addressed through measurement of inter-observer reliability and assessing fidelity of implementation using checklists (Campbell & Tincani, 2011; Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015; Jung & Sainato; 2015; Kryzak & Jones, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Two studies collected inter-observer reliability data but did not evaluate implementation fidelity (El Zein et al., 2016; Koegel, Oliver & Koegel, 2018). One study used Horner et al. (2005) quality indicators as a framework to guide research design, thus increasing the validity of findings (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). The content validity of this study was strengthened by enlisting experts in special education to advise on the suitability of intervention materials (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Two studies highlighted the potential for carryover effects to act as a confounding variable due to the lack of a reversal phase in the alternating treatment design (Carnett et al., 2014; El Zein et al., 2016).

2.9.1.3 Data Analysis. Data analysis in qualitative studies was strengthened by detailed accounts of methods used, thus increasing the transparency and trustworthiness of the findings (Stallings, 2022; Wood, 2023). Two studies described theoretical underpinnings of data analysis, situating methods used in grounded theory (Stallings, 2022), and thematic and content analysis within an interpretative paradigm (Wood, 2023). Data analysis through application of the research questions and theoretical constructs strengthened the reliability of findings (Wood, 2023). In addition, triangulation enhanced the validity and credibility of findings in studies that analysed multiple data sources to address the research questions (Stallings, 2022; Wood, 2023). Inclusion of verbatim quotes to accompany the illustration of themes derived from data increased the authenticity and richness of data, as well as enhancing transparency of the research process (Wood, 2023). Conversely, one study did not engage in systematic data analysis and rather described observations and performance gains noted by the researcher when implementing the intervention (Porter, 2012). This increases the risk of subjectivity and contributes to lack of rigour. Moreover, it raises issues in terms of replicability, thus limiting the contribution of findings.

The single-subject studies incorporated visual analysis to compare dependent variables across conditions using percentages (Campbell & Tincani, 2011; Carnett et al., 2014;

Daubert, Hornstein & Tincani, 2015; El Zein et al., 2016; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Kyrzak & Jones, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Comprehensive description of patterns in the data across various conditions was observed (Campell & Tincani, 2011; Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Kyrzak & Jones, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Graphs to depict trends over time and complement descriptions of data analysis methods increased the readability of findings (Campell & Tincani, 2011; Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015; El Zein et al., 2016; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Kyrzak & Jones, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). All single-subject studies conducted separate analysis on the effect of the independent variable on the dependant variable for each subject (Campell & Tincani, 2011; Carnett et al., 2014; Daubert, Hornstein & Tincani, 2015; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Kyrzak & Jones, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). Establishment of stability in the baseline phase ensured a reliable and consistent starting point pre-intervention (Daubert, Hornstein & Tincani, 2015; Jung & Sainato, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). One study also conducted more detailed trend analysis and change level analysis to demonstrate both variability and stability in the data, as well as yielding large effect sizes (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023).

Social validity data were gathered in five studies to ascertain the feasibility and acceptability of interventions from teacher and parent perspectives (Campbell & Tincani, 2011; Daubert, Hornstein & Tincani, 2015; Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). An absence of social validity data was identified as a limitation (El Zein et al., 2016; Porter, 2012; Stallings, 2022; Wood, 2023).

2.9.2 Synthesis of Findings

2.9.2.1 RQ1: How are absorbing interests incorporated into interventions for Autistic primary school-aged children? Included studies implemented a range of absorbing interest-based interventions. This included Power Card strategies (Campbell & Tincani, 2011; Daubert, Hornstein & Tincani, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023), which involves the use of a card and script that describe a character relating to the child's absorbing interest resolving a situation by using a target behaviour or skill (Gagnon, 2001; Lanou, Hough & Powell, 2012; Spencer et al., 2008). Power Cards were used to teach a range of skills including turn-taking (Daubert, Hornstein & Tincani, 2015), direction following (Campbell & Tincani, 2011) and learning skills to respond to bullying (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023), thus demonstrating their versatility based on the child's needs and highlighting their particular application in teaching social skills and behaviours. These interventions were informed by Gagnon (2001), thus providing a clear structure for the intervention and ensuring that implementation was in line with best-practice (Campbell & Tincani, 2011; Daubert, Hornstein & Tincani, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). In addition, the use of absorbing interests in video modelling was noted in one study (Jung & Sainato, 2015), as games embedded with absorbing interests were used as a context for modelling play skills. Other interventions included the use of token economies (Carnett et al., 2014), whereby children received absorbing interest-based tokens as a reward for on-task behaviour. Conversely, some studies referenced embedding absorbing interests in learning materials (El Zein et al., 2016) and social activities (Kryzak & Jones, 2015; Koegel, Oliver & Koegel, 2018; Porter, 2012). Two studies in the review did not facilitate an intervention, but rather considered the role of absorbing interests as a mode of intervention delivery in art therapy (Stallings, 2022) and in curricular and pedagogical practices (Wood, 2023). Subsequently, Stallings (2022) devised the "Special Interest Connection Framework" as a suggested framework to facilitate the therapeutic process by centering therapy on the interests and preferred interaction modes of Autistic individuals. The findings of the aforementioned studies provide valuable insights into aspects of effective intervention implementation and elucidate factors associated with positive outcomes, as well as suggesting ways in which absorbing interests can be incorporated in interventions to support Autistic children across contexts.

Interestingly, two studies included non-Autistic peers in interventions as play partners (Jung & Sainato, 2015; Koegel, Oliver & Koegel, 2018), choosing activities and games which

aligned with preferences and interests of the Autistic and non-Autistic children to promote more interactive play and spontaneous engagement. This reinforces the idea of absorbing interests as a social conduit and supports Autistic children in fostering and sustaining meaningful relationships with peers (Gass, 2013), as well as supporting the proposal that peer-mediation can lead to positive social outcomes for both Autistic and non-Autistic children (Dervan, Egan & Ring, 2024). In this way, shared interests may help to overcome the Double Empathy Problem (Milton, 2012) by reducing othering and instead developing shared understandings between Autistic and non-Autistic children. Further examples of this are provided in Wood (2023), whereby a teacher describes how a mutual interest in Disney supported shared understanding and positive rapport with an Autistic student. Stallings (2022) also reiterated how sharing interests can support social initiations and development of therapeutic relationships with Autistic adolescents.

Another factor in the implementation of interventions is the use of evidence-based strategies to further support the participation of children. This included use of visual cues (Carnett et al., 2014), task analysis and structured activities (Jung & Sainato, 2015), explicit teaching and modelling skills (Jung & Sainato, 2015, Porter, 2012), allowing choice in data collection methods (Wood, 2023) and incorporating a familiarisation period to facilitate development of rapport (Wood, 2023). Interventions such as video modelling and Power Cards have a visual component which may support Autistic children in accessing, retaining and generalising information relating to target skills or behaviours (Rutherford et al., 2020). Approaches contrary to neuro-affirmative practice were also observed, such as teaching and reinforcing Autistic children to make eye contact (Kryzak & Jones, 2015) and providing contingent access to absorbing interests (Carnett et al., 2014). Although research now indicates that such practices can be distressing for the child and damaging to wellbeing (Murray, 2018; Woods & Waltz, 2019), this perhaps illuminates the paradigm shift since the publication of these studies, as the Neurodiversity Movement and neuro-affirmative approaches have only recently gained traction in research and practice (Donaldson, Krejcha, & McMillin, 2017; Dubey, 2024, Milton et al., 2020). This emphasises the importance of future research remaining cognisant of ethical implications of interventions and ensuring that research aims are in line with priorities of the Autistic Community.

As well as diversity in the range of interventions and modes of intervention delivery, findings of the current review indicate variability in methods used to gather information on Autistic children's absorbing interests. As there is a lack of validated measures to

comprehensively capture all aspects of absorbing interests (Nowell et al., 2021), data about children's absorbing interests appear to be typically collected through questionnaires and interviews with parents and teachers, whilst direct observation using quantitative measures and video-recordings are the primary data collection methods used with Autistic children (Tansley, Parsons & Kovshoff, 2022). There appears to be a dearth of qualitative research conducted on this topic (Tansley, Parsons & Kovshoff, 2022). Moreover, one study in the current review highlighted the absence of well-established procedures for differentiating between highly preferred stimuli and a true absorbing interest (Carnett et al., 2014). Therefore, as well as deliberating how absorbing interventions are effectively incorporated into interventions, a consideration for future research is to ascertain the most appropriate way to identify, conceptualise and operationalise Autistic children's absorbing interests.

2.9.2.2 RQ2: What is the impact of absorbing interest-based interventions on Autistic primary school-aged children's outcomes? This review provides valuable insights into the positive impact of absorbing interest-based interventions on Autistic children's outcomes across social, cognitive and affective domains. For example, a token economy which included the absorbing interest of a seven-year-old Autistic boy, resulted in increased on-task behaviour and decreased behaviour that challenges, when compared to baseline and control conditions (Carnett et al., 2014). Additionally, embedding absorbing interests in a video modelling intervention appeared to result in increased verbal and non-verbal engagement with games and non-Autistic peers (Jung & Sainato, 2015). Absorbing interest-based social interventions were also associated with increased social initiation (Koegel, Oliver & Koegel, 2018; Stallings, 2022; Wood, 2023), as well as development of pretend play (Porter, 2012). Wood (2023) reported increased ease and elaboration in communication when conversations revolved around children's absorbing interests. This appears to also be applicable in therapeutic contexts, as absorbing interests provided a means for Autistic individuals to "safely communicate about their inner world and understand their outer world" (Stallings, 2022, p.125). Stallings (2022) highlights the propensity of absorbing interests to aid teaching of concepts, social rules and skills relating to emotional literacy and support regulation in therapy by creating metaphors or providing examples of how a preferred character dealt with a difficult event.

As well as social communication gains, embedding absorbing interests in learning tasks and materials was associated with greater access to the curriculum and participation in learning, increased task completion and enhanced child-adult rapport (Wood, 2023). Another

study noted improved reading comprehension for young adolescent boys when reading texts incorporated absorbing interests, including higher performance in tasks such as oral retell and question answering (El Zein et al., 2016).

Improvement in children's motivation across studies was also observed (Campbell & Tincani, 2011; Jung & Sainato, 2015; Kryzak & Jones, 2015; Wood, 2023). This reiterates that absorbing interests may be more potent than other reinforcers, as they create an environment that continuously reinforces engagement. Absorbing interest-based interventions mark a shift from adult-led to child-led learning (Wood, 2023), empowering the child as the expert, which may also explain increased spontaneous engagement with both activities and others in some studies (Jung & Sainato, 2015; Stallings, 2022; Wood, 2023). Notably, Koegel, Oliver and Koegel (2018) added an additional dimension to their intervention by incorporating absorbing interests in activities that were identified as preferred and non-preferred for participants. Results indicated that although children's interest level and affect increased when absorbing interests were incorporated in preferred activities, interest returned to a low range when absorbing interests were included in non-preferred activities (Koegel, Oliver & Koegel, 2018). This suggests that absorbing interests were not reinforcing enough to increase engagement in non-preferred activities (Koegel, Oliver & Koegel, 2018). Such findings provide valuable considerations to inform the design of absorbing interest interventions, particularly regarding the choice of intervention activities and targets. Further research is required to determine whether it is possible to increase the reinforcing nature of non-preferred activities using absorbing interests (Koegel, Oliver & Koegel, 2018).

Concerns of teachers and parents regarding the potential for absorbing interest-based interventions to lead to increased behaviours that challenge and increased intensity or perseveration around the interest were referenced (Carnett et al., 2014; El Zein et al., 2016; Kryzak & Jones, 2015). Wood (2023) described that absorbing interests can inhibit children from engaging with other task requirements. Daubert, Hornstein and Tincani (2015) noted an increase in echolalic comments relating to the absorbing interest during the intervention and perceived this to limit social conversations and comments, regrettably without considering potential communicative or regulatory functions of the echolalia. However, across studies there was no evidence suggesting that interventions resulted in increased intensity or perseveration relating to the absorbing interest. Moreover, absorbing interests were associated with reduced behaviours that challenge in three studies (Jung & Sainato, 2015; Kryzak &

Jones, 2018; Wood, 2023), perhaps relating to the finding that absorbing interests can act as an anxiety mediator (Stallings, 2022).

Importantly, acquired skills appeared to be maintained, for example when the Power Card was faded and withdrawn (Campbell & Tincani, 2011; Daubert, Hornstein & Tincani, 2015; Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023) or when follow-up data were collected post-intervention (Jung & Sainato, 2015; Kryzak & Jones, 2015). As well as this, generalisation of skills across other contexts was reported. Porter (2012) highlighted opportunities to extend absorbing interests to different themes, divergent activities and materials. In addition, generalisation occurred in other studies when participants demonstrated appropriate game-play and prosocial behaviour during untrained games (Jung & Sainato, 2015) and initiated joint attention with novel partners and activities (Kryzak & Jones, 2015). However, there was variability in that some, but not all participants in one study showed generalisation (Kryzak & Jones, 2015).

The findings of this review are in line with previous research demonstrating the positive impact of absorbing interests on Autistic children's outcomes across social, academic and affective domains (Davey, 2020; Dunst, Trivette & Hamby, 2012; Grove et al., 2018; Harrop et al., 2019; Ninci et al., 2020; Winter-Messier, 2007a). This supports the cultivation of educational environments which value and encourage absorbing interests, thus potentially offering a reversal to the cycle of barriers to inclusion and wellbeing previously experienced by Autistic children (Wood, 2023).

2.9.2.3 RQ3: What is the feasibility and accessibility of implementing absorbing interest-based interventions with Autistic primary school-aged children? Findings of this review highlight the feasibility and acceptability of absorbing interest-based interventions among key stakeholders, including teachers, parents and Autistic children. Across studies, absorbing interest-based interventions were considered to be cost-effective and efficient, as well as easily applicable and conducive to adaptation across various contexts. Although many studies had small sample sizes, the implementation and design of interventions by teachers (Campbell & Tincani, 2011; Daubert, Hornstein & Tincani, 2015; Koegel, Oliver & Koegel, 2018; Wood, 2023) and procedural fidelity data (Jung & Sainato, 2015) support the application of findings to classroom settings. Social validity data indicated that such interventions are feasible for teachers to implement successfully (Campbell & Tincani, 2011) with minimal additional resources. Across studies, teachers reported that they could foresee

opportunities regarding application of interventions within their classroom setting (Campbell & Tincani, 2011; Jung & Sainato, 2015; Wood, 2023). Examples cited include incorporating absorbing interests in assessment of learning to increase motivation, reduce student stress and promote maximum performance (Wood, 2023) and using the Power Card strategy to build emotional regulation skills and reduce behaviours that challenge (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023). This is of interest given the evidence supporting the effectiveness of interventions for Autistic children being implemented by teachers within the classroom setting (Dervan, Egan & Ring, 2024) rather than by unfamiliar adults in a clinical setting. In addition, parents indicated that the absorbing interest-based interventions were mostly feasible to implement and supported children in developing play skills (Daubert, Hornstein & Tincani, 2015), motivation, organisation (Ulu Aydin, Cifci Tekinarslan & Gulec Aslan, 2023) and happiness (Wood, 2023).

Few studies sought children's opinions regarding the acceptability of absorbing interest-based interventions. There was variability in attitudes across studies that did gather social validity data from Autistic children. Wood (2023) reported children's positive attitudes towards including absorbing interests in educational activities. In Daubert, Hornstein and Tincani (2015), one participant indicated that they would like to use Power Cards more frequently, whilst another participant stipulated that they did not want more Power Cards. Responses differed based on the question phrasing, as both participants indicated that they liked getting help from their preferred character (Daubert, Hornstein & Tincani, 2015). Interestingly, Koegel, Oliver and Koegel (2018) found an association between the perceived acceptability of the intervention and the children's attitudes towards the type of activity.

Porter (2012) created web diagrams to map out the range of possible play activities that could be linked to the child's absorbing interests, thus facilitating planning of learning opportunities and experiences. However, no studies incorporated absorbing interests in curricular planning or described a process of linking the intervention with target monitoring systems already in place. This would provide teachers with a mechanism to facilitate thematic integration across curricular areas, as well as evaluating progress towards targets over time. Moreover, this may increase the feasibility of implementing absorbing interest-based interventions within a broad and balanced curriculum by supporting intentional provision of meaningful experiences with consideration of specific targets and outcomes for individual children (National Council for Curriculum & Assessment (NCCA), 2023a). Used in this way, interest-based learning would enable teachers to align their practice with contemporary

emergent, child-led curricular frameworks, as we endeavour to move away from prescriptive, “one size fits all” curricula (Coolahan et al., 2017; NCCA, 2019; NCCA, 2023a; NCCA 2023b; Ring & O’ Sullivan, 2021).

2.9.3 Limitations of the Systematic Review

In addition to the limitations identified in the selected studies, there are some possible constraints associated with the systematic review itself. Despite conducting a thorough search strategy guided by pre-defined eligibility criteria, the review accessed a limited number of databases which may have excluded eligible studies. Some aspects of the eligibility criteria may have also prevented identification of relevant findings. In particular, there was propensity for publication bias to occur, as only peer-reviewed papers were included. Although inclusion criteria stipulated a focus on Autistic children in primary school due to the scope of the review, the findings may have been impacted by the decision to exclude preschool and secondary school-aged Autistic children. Furthermore, although a clear account was provided of the screening process employed, the review did not have scope to assess inter-rater reliability for screening. The researcher acknowledges the risk of bias in screening and interpreting the findings. As well as these methodological limitations, the variability of interventions across included studies prevented closer consideration of the impact according to specific intervention types, thus resulting in some ambiguity regarding what an effective absorbing interest-based intervention looks like in practice. Further research is required ascertain how interventions using absorbing interests should be devised and delivered in order to delineate the impact of absorbing interest-based approaches on Autistic children’s outcomes.

2.10 Implications for Future Research

Notwithstanding these limitations, the findings of this review have a wide-reaching impact for the Autism Community from both a policy and practice perspective, as well as providing valuable considerations for future research. This systematic review explored the versatility of absorbing interest-based interventions, exploring the various types of interventions that have been implemented and detailing the impacts of these interventions on Autistic children. Given the emphasis placed on child-led learning in policy and practice in recent decades as part of inclusive education for all (Ring, 2024), understanding how Autistic individuals experience their world is important. Herein, educators and practitioners working with Autistic children have a role in gathering information. Despite this, the current review

found a dearth of studies which included the Autistic child's voice or sought parent or teacher perspectives on their experience of absorbing interests. Studies largely incorporated experimental research designs focused on facilitating controlled interventions with high levels of adult prompting and did not seek qualitative information on the impact of interventions beyond social validity data. Frequent use of medicalised language with negative connotations such as "restricted and repetitive behaviours", "deficits" and "comorbid disorders" implies that monotropism is a disposition to be pathologised rather than an inherent strength of Autistic individuals. Having noted these patterns, the empirical study enlists a neuro-affirmative approach and includes the Autistic voice to explore how children, their teachers and families experience absorbing interests. This endeavour to further understand the meaning, function and value that absorbing interests hold for those who experience them aligns with the call to elucidate and appreciate the diverse experiences of Autistic individuals, which is a key research priority of the Autism community (GoI, 2024; Roche, Adams & Clarke, 2021).

Findings of this review suggest that it is possible to tailor absorbing interest-based interventions to suit the individual characteristic of Autistic individuals as well as the range of contexts in which they learn. However, research also highlights the need for further substantiation of implementation of evidence-based practices for Autistic children in real-life educational settings (Dervan, Egan & Ring, 2024). To investigate this proposal further, the empirical study aligns an absorbing interest-based approach with existing curriculum planning, pedagogies and monitoring processes, as well as considering implementation science to ensure meaningful inclusion is not only an ideal, but a reality in our schools.

Chapter 3: Empirical Paper

3.1 Chapter Overview

This chapter outlines the research methodology carried out in the present study. It begins by providing an overview of the research area and theoretical perspective. Following this, the research design, paradigm, participants, data collection, analysis methods and ethical considerations are described. Finally, the findings are presented and interpreted in light of the research questions.

3.2 Absorbing Interest-Based Learning to Support Inclusion

Despite significant policy advances and evolving understandings of Autism in recent decades, Autistic children continue to face barriers to inclusion in education (Bailey & Baker 2020; Horgan, Kenny & Flynn, 2023; Lynam et al., 2024; Stephenson et al. 2021; Warren et al. 2021; Wood 2023). Development of approaches that support Autistic children's participation and inclusion in education in a way that meets their needs while affirming their Autistic identity therefore remains a priority for the Autism community and educational stakeholders alike (Cage et al., 2024; Department of Children, Equality, Disability, Integration and Youth (DCEDIY), 2024; Lynam et al., 2024). The Neurodiversity Paradigm endorses valuing Autistic identity, accepting variability, and leveraging strengths to increase inclusivity, rather than exclusively focusing on challenges (Leadbitter et al., 2021; Rose & Meyer, 2002). This same principle is endorsed under Universal Design for Learning (UDL), a framework which supports inclusive education of all children by enhancing flexibility and accessibility, as well as including learner voice and choice in the design and implementation of learning experiences (CAST, 2024; Lohmann, 2023; Zhang et al., 2022).

A strength often associated with Autistic cognition is the ability to hyperfocus, resulting in intense areas of interest, referred to as absorbing interests. This appears to be linked with monotropic cognition, defined as the tendency for Autistic individuals to focus intently on one stimulus to the exclusion of others (Murray, 2018; Murray, Lesser & Lawson, 2005; Woods & Waltz, 2019). Monotropic cognition results in differences in patterns of behaviour and interest that constitute a core diagnostic criterion of Autism (APA, 2022). Although historically these areas of intense or specialist interest were viewed as socially inhibiting fixations (Winter-Messiers et al., 2007), more recently momentum has shifted towards exploring how absorbing interests can be embedded in learning environments to support Autistic children using strengths-based antecedent approaches that align with

inclusive educational practice (Lanou, Hough & Powell, 2012; Ninci et al., 2019). A number of studies, reviews and meta-analyses conducted around this topic corroborate the benefits of embedding interests in educational interventions to optimise outcomes and develop skills across adaptive functioning, communication, academic and social domains (Davey, 2020; Dunst, Trivette & Hamby, 2012; Gunn & Delafield-Butt, 2016; Harrop et al., 2019; Ninci et al., 2019; Tansley, Parsons & Kovshoff, 2022; Winter-Messiers, 2007). In comparison to research conducted on social communication differences in Autism, research on monotropism and absorbing interests is limited (Nowell et al., 2021; Williams, Wharton & Jagoe, 2021). Developing further insights into the role of absorbing interests in engagement, motivation, socio-emotional wellbeing and self-regulation can deepen understanding of the Autistic experience, as well as informing policy and practice around inclusion of Autistic children in education.

3.3 Theoretical Perspective

Increased motivation and engagement often associated with absorbing interests for Autistic children may be understood through the lens of Self Determination Theory (SDT). SDT stipulates that although humans have inherent tendencies towards mastering challenges and new experiences, effective functioning requires ongoing satisfaction of basic psychological needs for competence, autonomy, and relatedness (Deci & Ryan, 2012; Guay, 2022; Ryan & Deci, 2024). Factors undermining these needs often induce defensiveness and rigidity, whilst supportive factors result in growth and wellbeing (Ryan & Deci, 2024). Engagement with absorbing interests provides Autistic people with opportunities to feel competent and knowledgeable about a particular topic, feel autonomous being their authentic selves, and experience relatedness when sharing their absorbing interest with others. This suggests that learning experiences that are reflective of the children's interests are likely to be more meaningful (Murray, 2018; Ring et al., 2018) and self-directed, thus resulting in optimal motivation (Ryan & Deci, 2024).

As well as contributing understandings as to why absorbing interests are so captivating for Autistic individuals, SDT may guide the development of absorbing interest-based interventions with a focus on developing autonomy, competence and relatedness (Guay, 2022). This has implications for educational psychologists, both in their direct implementation of interventions with children, and in their role in empowering teachers to use pedagogies and practices that meet children's psychological needs within the school context and thus enhance meaningful inclusion (Guay, 2022). SDT also offers interesting

perspectives on using antecedent versus consequence interest-based learning approaches. SDT differentiates between intrinsic motivation, defined as the volition associated with an inherently enjoyable or interesting activity, and extrinsic motivation, which typically results from an externally imposed consequence or contingency for behaviour (Ryan & Deci, 2024). According to SDT, intrinsic motivation is associated with increased autonomy and is therefore linked with positive well-being and effective performance (Howard et al., 2021; Ryan & Deci, 2024). Conversely, SDT proposes that extrinsic motivation results in diminished autonomy and is correlated with decreased long-term performance, persistence and wellbeing (Guay, 2022; Howard et al., 2021). As such, capitalising on the intrinsically motivating nature of absorbing interests by weaving them into learning experiences appears to be more conducive to enhanced wellbeing and positive long-term outcomes than providing access to the interest contingent on performing another behaviour (Ryan & Deci, 2024).

Although SDT offers a robust framework for understanding the experience of absorbing interests and their applicability in learning experiences, the theory has been critiqued for oversimplifying the complexity of human motivation and neglecting to consider cultural factors and individual differences in motivational processes (Sheldon et al., 2003). Aiming to address this limitation, the current research considers contextual factors that may influence the child's motivation and engagement by exploring parent and teacher perspectives on the impact of the Interest Map intervention, as well as considering facilitators and barriers to its effective implementation. The research seeks Autistic children's own views into their experiences of absorbing interests to further understand the "cognitive architecture that underpins children's learning" (Ring et al., 2018, p.38) and motivational processes.

3.4 Child Voice and Participation in Research

Based on Article 12 of the United Nations Convention on the Rights of the Child (UNCRC), all children have a right to express their views in decision-making about matters that directly impact their lives (Department of Children & Youth Affairs, 2015; Ring, Harte & Harmon, 2021; United Nations, 1989). Research demonstrates the positive impact of valuing children's voice on their self-esteem, sense of belonging, agency, and overall development (Ring et al., 2018; Ring, Harte & Harmon, 2021). Harnessing and responding to children's voices promotes active and meaningful participation in learning (Ring, Harte & Harmon, 2021). Including Autistic children's perspectives provides valuable contributions to research on the basis that whilst "awareness is about knowing something exists, understanding is about stepping into a person's shoes and validating their perspective"

(Harris, 2018, p.xiv). Despite acknowledgement of this principle in policy, the literature review conducted as part of this study illuminated a scarcity of research exploring the origin, role and significance of absorbing interests in the lives of Autistic children from their perspectives (Brown et al., 2024a; DCEDIY, 2024; Grove et al., 2018; Lynam et al., 2024; Trew, 2024). Across Autism research more generally, opportunities for Autistic individuals to contribute their views are limited (Lewis-Dagnell, Parsons & Kovshoff, 2023; Lung et al., 2024; Trew, 2024) and inclusion of Autistic voice can be tokenistic rather than leading to transformative actions. In particular, within the Irish context there is a dearth of research exploring the lived experiences of Autistic children attending special classes within mainstream schools, despite the considerable expansion of this provision in recent years (Banks & McCoy, 2017; NCSE, 2024).

The lacuna of Autistic children's voice may be attributed to a reticence to directly explore this cohort's insights into their experiences due to perceived challenges associated with gathering the views of children with social communication differences (Cunningham, 2020; DCEDIY, 2022; Lynam et al., 2024; Mullally et al., 2024). This includes attitudinal and practical obstacles, such as assumptions of reduced capacity and difficulties engaging Autistic children in conventional research approaches that impose significant social communication demands (Lebenhagen, 2020). Resultingly, practices designed to support Autistic individuals often lack Autistic perspective (Milton, 2012).

The Lundy Model (2007) was developed to operationalise Article 12 of the UNCRC in recognition of the challenges facing education systems in including children's voices. This model supports practitioners in realising children's right to participate (Kennan, Brady & Forkan, 2019), and has been applied in research with Autistic children (Gill, Clarke & Fullerton, 2019; Rao, 2020). It emphasises four interrelated elements of space, voice, audience and influence which are central to meaningful inclusion of child voice (Kennan, Brady & Forkan, 2019; Lundy, 2007) and have been applied in the current study (Table 3.1).

Table 3.1*Applying Lundy's Model in the Current Research*

| Element | Application in the Current Research |
|--|---|
| <u>Space</u> Create a safe physical and emotional space | <ul style="list-style-type: none"> • A familiarisation and observation period was incorporated prior to data collection to increase children's feeling of safety. • The data collection session was carried out in the children's classroom to increase familiarity. • The researcher conducted a session with each child individually to give them time and space to express their views. |
| <u>Voice</u> Build children's capacity to express their voice | <ul style="list-style-type: none"> • The researcher gained information on the children's communication differences and preferences in advance of the child session. • The Mosaic Approach involved providing children with multiple means of expression and valuing various forms of communication. • All methods used to elicit child voice were developmentally appropriate and neuro-affirmative. • The open-ended nature of many of the activities provided the children with autonomy and choice. • Children were informed on the research aims using a child-friendly information sheet which highlighted the value of their voice and they provided assent in advance of participation. |
| <u>Audience</u> Communicate children's views with decision-makers | <ul style="list-style-type: none"> • The researcher engaged in active listening when working with the children, checking regularly for shared understanding. • Children were informed on the research aims and how the data would be used using a child-friendly information sheet and they provided assent in advance of participation. • The Mosaic Approach enabled the researcher to co-create understanding with the children and piece together data sources to share with teachers and parents. |
| <u>Influence</u> Ensure children's views lead to change | <ul style="list-style-type: none"> • Findings informed the development of an Interest Map for each child and information was shared with teachers to influence subsequent learning experiences. • Samples of data gathered from the children are included as artefacts in the research. • The research will be disseminated to inform practice and policy within the field of educational and child psychology. |

3.5 The Current Study

Aiming to address the dearth of qualitative research conducted on absorbing interests, this study prioritises the subjective experiences of Autistic children and their supportive adults, as well as delineating the impact and feasibility of implementing an Interest Map intervention within a special class for Autistic children. The study explores the following three research questions (RQ), informed by the existing literature and theory:

RQ 1: How do Autistic children, their parents and their teachers experience their absorbing interests?

RQ 2: What is the impact of using an Interest Map which includes absorbing interests in learning experiences?

RQ 3: What is the feasibility of implementing an Interest Map in a special class for Autistic children in the Irish context?

3.6 Methodology

3.6.1 Research Paradigm

This research was conducted through the lens of a constructivist paradigm. Constructivism posits that individuals actively “construct their own understanding and knowledge of the world through experiencing and reflecting on those experiences” (Adom, Yeboah & Ankrah, 2016, p. 2). Epistemologically, the constructivist paradigm perceives knowledge as being co-created through individuals’ interactions and dialogues with others, and experiences of their environment (Cresswell, 2013; Cresswell & Poth, 2016; Gannon, Taheri & Azer, 2022; Vygotsky, 1978). From an ontological perspective, constructivism assumes that there is not one absolute truth, but rather multiple realities exist based on diversity of experiences (Cresswell, 2013). Therefore, this paradigm affirms the heterogeneity of the Autistic experience, as well as the influence of context on one’s perception of reality. Constructivism is deemed appropriate in the current study as the researcher seeks to co-create holistic, nuanced understandings of the perspectives of Autistic children, their parents and teachers, and the meanings they attach to absorbing interests. The research uses approaches including semi-structured interviews, reflective dialogues and the Mosaic Approach which empower the children, parents and teachers to voice and reflect on their lived experiences. Within these approaches, and in line with the constructivist paradigm, the researcher is an integral part of the process of knowledge creation, as their background and perspectives

shape interpretation of the data (Cresswell & Poth, 2016; Gannon, Taheri & Azer, 2022). Moreover, constructivism embraces the qualitative, iterative approach undertaken in this research.

3.6.2 Research Design

An instrumental multiple case study design, framed within the assumptions and characteristics of a qualitative approach (Stake, 1995) was used in the current research. Qualitative case study designs incorporate inductive methods to address research questions and gain in-depth, nuanced insights into the significance that individuals attribute to their actions, beliefs, thoughts and experiences (Cresswell & Poth, 2016; Stake, 1995). Although themes can be identified to develop general understandings and support generation of theories (Bibi, Khan & Shabir, 2022), the focus is on understanding the meaning that individuals or groups attach to experiences rather than generalising findings (Stake, 1995). In particular, instrumental case studies seek to understand a particular phenomenon or “quintain” (Stake, 1995, 2013) and therefore differ from intrinsic case studies whereby the primary goal is to gain a better understanding of the particular case (Stake, Denzin & Lincoln, 2003). In the current research, four cases, each consisting of a child, parent, teacher triad, were selected to provide insights into the ‘quintain’ of absorbing interests and facilitate understanding of how they are experienced by Autistic children and their supportive adults (Cresswell & Poth, 2016).

A case can be defined as “a complex entity operating within a number of contexts” in a bounded system (Stake, Denzin & Lincoln, 2003, p. 141). According to the philosophical assumptions of Stake (1995), a qualitative case study is holistic and considers the interrelationship between a phenomenon and its contexts (Yazan, 2015). Data collection is typically carried out within the natural setting (Cresswell & Poth, 2016) and rooted in participants’ everyday lives. This provides comprehensive, nuanced insights into inherent and complex relationships (Crowe et al., 2011; Sibbald et al., 2021) and facilitates exploration of the systems and contexts around the child (Bronfenbrenner & Morris, 2006; Luff, 2023). In seeking perspectives of parents and teachers, this study hopes to understand how absorbing interests are intertwined within the child’s broader contexts (Lizon, Taelis & Vanheule, 2024). In addition, the study is empirical in that it is based on researcher observations and interactions of Autistic children within their class setting (Yazan, 2015), as well as during semi-structured interviews with parents and teachers. The case study is emphatic, as the researcher endeavoured to accurately reflect participants’ true experiences and stories in the

data (Yazan, 2015), even if they include perspectives, language and opinions that are divergent from those endorsed by the researcher. The research is interpretative as it considers the interaction between the researcher and the findings by emphasising the importance of reflexivity and maintaining awareness of the researcher's positionality and role in constructing knowledge through inter-subjectivity (Kekeya, 2021; Yazan, 2015).

Despite the appropriateness of a qualitative case study design to the current research, there are a number of associated limitations. Data sources typically rely on subjective interpretations which are susceptible to bias (Bibi, Khan & Shabir, 2022; Cronin, 2024). As such, qualitative case study designs have been criticised for their lack of rigour (Sibbald et al., 2021), which is compounded by inconsistency and incongruency in methods used, as well as variable quality in reporting findings (Yazan, 2015). In order to mitigate these limitations, the current research strives to enhance rigour and consistency of methodologies used by applying evidence-based validity frameworks to inform and evaluate the methodology (Appendix F). Clear documentation and justification of approaches used enhances transparency (Crowe et al., 2011). The researcher placed continuous emphasis on reflexivity throughout the research process, using a reflexive journal to document decisions and critically reflect on interpretations, observations and emerging ideas (Appendix G). Reflexivity is the process of challenging and critically evaluating researcher positionality and contemplation of the ways in which this situatedness impacts the research process (Berger, 2015). The process of reflection reduced the impact of researcher subjectivity and bias, thus increasing the trustworthiness of the research (Berger, 2015; Cresswell & Poth, 2016).

3.6.3 Sampling Procedure

Purposive sampling was employed to recruit participants, as settings and individuals were selected on the basis that they have experience of an absorbing interest and can therefore inform understanding (Cresswell & Poth, 2016). The parameters for purposive sampling were based on pre-determined inclusion criteria which required participants to be enrolled in a special class for primary school Autistic children, have been assessed as Autistic and have an identified absorbing interest, as confirmed by parent and teacher reports and researcher observation of the child in school. Although purposive sampling and small sample sizes can limit external validity (Andrade, 2021), given that generalisability is not the aim of case study research, this was not considered to be an issue of significance in the current study (Bibi, Khan & Shabir, 2022; Cresswell & Poth, 2016; Cronin, 2024; Stake, 1995). The researcher contacted Principals of primary schools with a special class for Autistic children

within the locality by email (Appendix H) and phone inviting voluntary participation in the study.

3.6.4 Research setting

The research took place across three special classes for Autistic children within two mainstream rural primary schools in the Republic of Ireland. This setting was chosen as it aligned with the inclusion criteria, in that a confirmed diagnosis of Autism is a prerequisite to enrolment (NCSE, 2024). In addition, the targeted, supportive nature of provision in this setting was determined most conducive to the implementation and evaluation of the Interest Map intervention. The included schools had similar demographic characteristics as both were mixed Catholic primary schools with an enrolment of under 200 pupils, and both had a junior and senior special class for Autistic children, with six pupils enrolled in each class. Resources appeared to be similar across the two schools, for example, children had access to individual work-stations, a sensory room, and Special Needs Assistants (SNA) to support their care needs.

3.6.5 Participants

Participants included four Autistic children, three teachers and four parents. This sample size was determined based on recommendations for case study research within the literature (Cresswell & Poth, 2016; Stake, 1995). All four children were assessed as Autistic by external agencies prior to beginning primary school. Each of the four cases are described below using pseudonyms.

3.6.5.1 Teacher and Parent Participants. Three teachers participated in the research ($N = 1$ female; $N = 2$ males). All teacher participants had more than ten years teaching experience, with between two and five years' experience teaching in an Autism class. The mothers of the four participants also took part in semi-structured interviews.

3.6.5.2 Child Participant 1. Amelia is 12 years old and in sixth class of primary school. She is an only child and lives at home with her parents. Amelia is enrolled in a Senior Autism Class but spends two thirds of the school day in the mainstream class. She returns to the Autism Class for break times, art lessons and maths lessons. According to parent and teacher reports, Amelia has experienced low self-esteem in recent years. Although she has a close friendship with one peer, she finds it difficult to engage with other children in her class and feels more comfortable in interactions with adults. Amelia reportedly engages well in learning activities, although she often lacks confidence in her abilities. Her SSP reflected

targets in developing competence and confidence in maths, improving fine motor skills and becoming more comfortable interacting with peers. Based on observations within the classroom, as well as according to parent, teacher and child reports, Amelia has a current absorbing interest in Pokémon. Amelia reported that her favourite Pokémon character is Pikachu. Amelia can reportedly recall the name and characteristics of every Pokémon character and enjoys collecting Pokémon figurines and merchandise.

3.6.5.3 Child Participant 2. Callum is 11 years old and in fifth class of primary school. Callum lives at home with his parents and younger brother. Callum is enrolled in a Senior Autism Class where he spends the majority of the day, supported by children from his mainstream class joining for some lessons. Callum has co-occurring Developmental Coordination Disorder (DCD). He reportedly struggles with engagement in learning activities and his attention varies based on his level of interest in a topic. Callum's SSP targets focused on developing reading fluency and comprehension, developing fine motor skills, as well as supporting his ability to interact and communicate with others. Based on observations within the classroom, as well as according to parent, teacher and child reports, Callum has a current absorbing interest in ships, in particular the Titanic and the Britannic. Callum enjoys carrying out research about ships, recounting facts and stories, and reenacting scenes about famous historical ships. He also enjoys building models of ships using Lego and other construction toys. Callum has very good focus for his absorbing interest and tends to persevere on the topic of ships in conversations with others. He also struggles to transition away from interest-based stimuli, which his teacher reported impacts his engagement in classroom activities and interactions with others.

3.6.5.4 Child Participant 3. Liam is ten years old and in fourth class of primary school. Liam is an only child and lives at home with his mum. Liam is enrolled in a Junior Autism class and joins the mainstream class for some lessons each day, as well as joining them for whole-school events. His SSP reflected targets relating to emotional regulation, using full sentences in conversations and following rules in structured games with peers. Based on observations, as well as teacher and parent reports, Liam has a current absorbing interest in Pokémon. He enjoys playing Pokémon video games, collecting and trading battle cards, drawing characters and reading Pokémon books. Liam demonstrated considerable knowledge of Pokémon characters, citing that Charizard was his favourite.

3.6.5.5 Child Participant 4. Dylan is 11 years old and in fifth class of primary school. Dylan lives at home with his parents and two older sisters. Dylan is enrolled in a Senior Autism class and is included in the mainstream class for some lessons each day, as well as joining them for whole-school events. Dylan reportedly experiences difficulties engaging in written activities. He often becomes overwhelmed by plans changing, or things not going his way. His SSP targets reflected goals around developing his ability to plan his ideas and structure his writing, as well as developing emotional regulation skills to help him cope with change. Based on observations, as well as teacher and parent reports, Dylan currently has two separate but related absorbing interests in puppets and animation. Dylan has a particular aptitude for drawing. He enjoys illustrating and creating characters, reading comic books and writing comics about his own characters. Dylan also enjoys collecting puppets and acting out scenes and plays using these puppets.

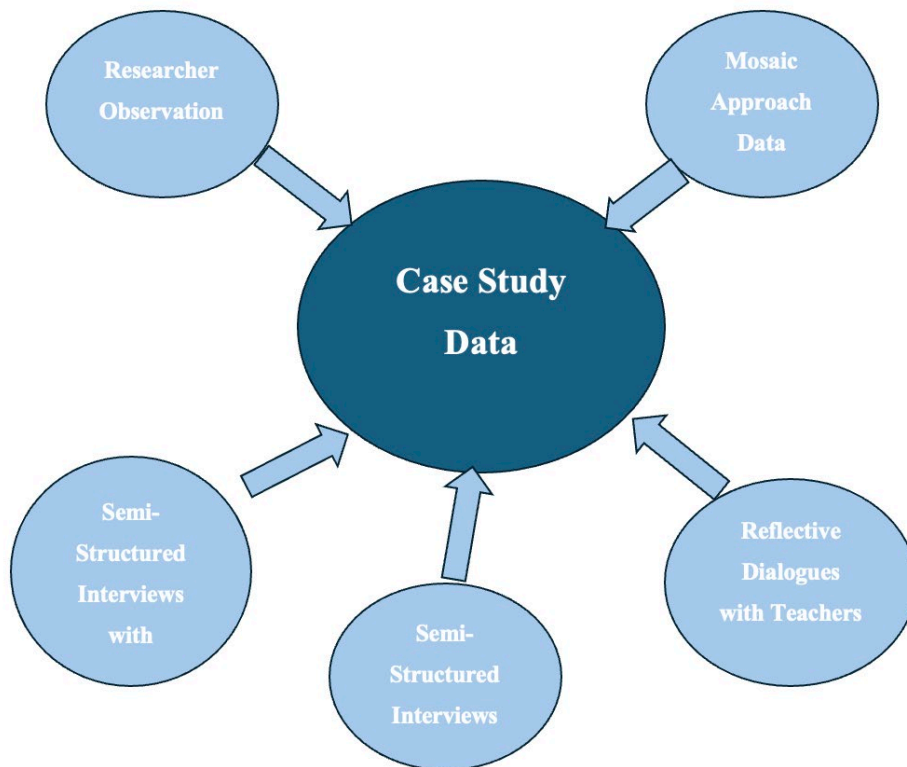
3.6.6 Data Collection Measures

An overview of data collection methods is provided in Figure 3.1 and detailed in Appendix I.

3.6.6.1 Observations. Observation allows for direct examination of individuals' behaviours in real time within naturally occurring contexts (Morgan et al., 2017), which from a constructivist perspective supports understanding of how children make sense of their world and experiences (Luff, 2023; Stake 1995). Observation of the children in the classroom setting was the first stage of data collection (Appendix T). This included recording field notes using an observation protocol (Appendix T) and documenting informal conversations with SNAs and teachers (Appendix G). This provided insights into the classroom routine and environmental factors, as well as further elucidating children's learning profiles to increase applicability of the Interest Maps to the specific context. Field notes were added to the reflexive journal and interpreted ahead of subsequent data collection (Appendix G). This informed the intervention, child-led session and interview phases, providing insights that may otherwise have been missed (Morgan et al., 2017) and contextualising the findings. The observation session also allowed for a familiarisation period, thus supporting the researcher in developing rapport with the children and putting them at ease in advance of the child-led session (Macdonald, 2021).

Figure 3.1

Data Collection Methods Contributing to the Case Study



3.6.6.2 Mosaic Approach to Data Collection. The Mosaic Approach is a participatory research method which places emphasis on exploring children’s lived experiences, interests and priorities through multi-modal meaning making (Clark, 2005, 2017). Centred around illuminating children’s voices through the pedagogy of listening (Clark, 2005), the Mosaic Approach is underpinned by Reggio Emilia’s theoretical perspectives, as children are facilitated to communicate in myriad ways using their “hundred languages” (Brandao & Theodotou, 2020; Edwards, Gandini & Forman, 1998). This aligns with the researcher’s epistemological and ontological positionality, whereby listening is viewed as a “creative process in which there is freedom to express an idea for the first time or in a new way...rather than understanding listening as “extracting the truth”” (Clark, 2005, p. 17). Moreover, the Mosaic Approach is suitable for Autistic children (Macdonald, 2021; Psaila, 2023) as it includes developmentally appropriate methods that do not rely solely on verbal communication and allow children to express their “voice” whilst respecting their differences and preferences (Cassidy, 2023; Hardy & Hobbs, 2017; Jansens et al., 2023; Lewis-Dagnell, Parsons & Kovshoff, 2023). Implementation of the Mosaic Approach was further complemented by applying the elements of space, voice, influence and audience within the child sessions (Table 3.1) (Lundy, 2007). Whilst Lundy’s model has been critiqued

for placing an onus on adults to interpret children's views, therefore risking misinterpretation (Rao, 2020), incorporating the Mosaic Approach facilitated co-construction of knowledge, aiming to ensure authentic representation of meaning and address power imbalances (Kennan, Brady & Forkan, 2019; Jansens et al., 2023; Turner, Ring & O' Sullivan, 2020).

A melange of child-led tools was used in the current research to contribute to the mosaic that depicted the child's experience of their absorbing interests (Appendix I). All tools were neuro-affirmative in nature and offered an alternative to approaches that value linguistic skills over all other languages (Clark, 2005, 2017). The researcher engaged in consultation with the teacher prior to data collection to review all tools and confirm their appropriateness and suitability for use with the children participating (Lewis-Dagnell, Parsons & Kovshoff, 2023). Data were subsequently interpreted by the researcher engaging in dialogue with the children, practitioners and parents.

A communication mat with visual prompts was used to engage the children in discussion about their absorbing interests (Appendix J), whilst remaining cognisant of social communication differences (Hayden et al., 2024; Peuravaara, 2021; Samuelsson et al., 2024). This allowed less static roles to emerge during the interview, as the researcher and participants took turns selecting a visual prompt for discussion (Peuravaara, 2021). Notably, it was important to check for shared understanding of symbolic representations to mitigate against potential misinterpretations (Lewis-Dagnell, Parsons & Kovshoff, 2023; Milton et al., 2023; Williams, Wharton & Jagoe, 2021). Research suggests that symbol or photo-based communication tools are more valuable when used in conjunction with other methods (Lewis-Dagnell, Parsons & Kovshoff, 2023), as was the case in the current research.

Photo Voice provided opportunities for the children to document evidence of their absorbing interests and things of importance within their school environment (Do et al., 2021). Photos taken subsequently stimulated discussions between the child and researcher and therefore shaped the research (Hardy & Hobbs, 2017). The children were also invited to create representations of their absorbing interests using construction toys including Lego and Playdough.

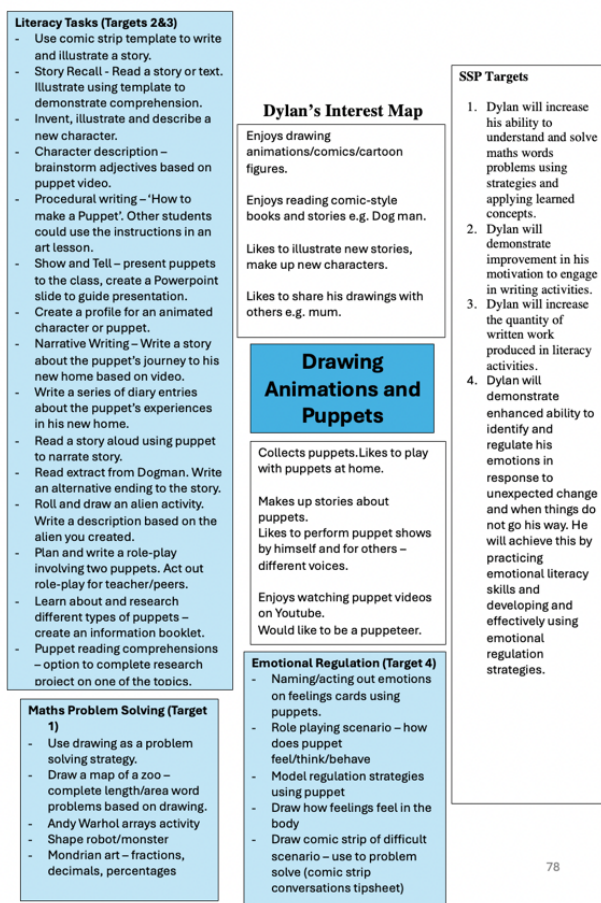
Finally, the children engaged in an Ideal Playtime Drawing Task (Appendix K), designed by the researcher to align with principles of Personal Construct Psychology (PCP) (Kelly, 1955), as well as being informed by the empirical base on absorbing interests. The Ideal Playtime Drawing Task is based on the Ideal Self Drawing Task (Moran, 2001, 2020)

and Ideal School Drawing Task (Williams & Hanke, 2007), which have been adapted and validated for use with Autistic children (Halsall, Clarke & Crane, 2021; Moran, 2006; Williams & Hanke, 2007). This newly adapted version involved giving the children prompts to illustrate their ideal playtime and non-ideal playtime. Throughout the Mosaic Approach process, the children’s comments, narrations and explanations were documented and labels were added to the data to support authentic interpretation of meaning. Data were subsequently pieced together, reviewed by the researcher and referenced during teacher and parent interviews to co-construct multifaceted understandings (Greenfield, 2011).

3.6.6.3 The Interest Map. The Mosaic Approach data were triangulated with observational data and information gleaned from discussions with teachers to inform the co-creation of an Interest Map (Figure 3.2) for each child, aligning their absorbing interests with targets in their SSP.

Figure 3.2

Sample Interest Map (Further examples in Appendix L)



The Interest Map concept was adapted from Davey (2020) using principles informed by the review of relevant literature and curricular frameworks (Figure 3.3). Teachers implemented the Interest Map over a five week period and were given flexibility to adapt it to suit their individual contexts, such that the intervention could be implemented as part of the children’s typical curricular experience (Appendix U). Guidelines were provided to ensure implementation fidelity (Appendix M) and teachers were asked to video-record a minimum of two Interest Map sessions with each child per week. These video recordings acted as stimuli for reflective dialogues with the researcher on the impact and feasibility of the Interest Map as an intervention.

Figure 3.3

Principles of the Interest Map



The researcher’s review of the video recorded data and implementation fidelity checklists completed by the teachers indicated that all participants adhered to the implementation guidelines provided (Appendix M). While there are inevitable limitations to the self-reporting and self-selection process involved, the researcher’s ongoing dialogue with the participants throughout the intervention further corroborated that overall, the Interest Map was implemented with fidelity. All children participating in the intervention engaged in a minimum of two weekly Interest Map sessions throughout the five week intervention period

as intended. Although some aspects of the intervention delivery were adapted by teachers to suit their individual context, these adaptations appeared to be consistent with the aims of the Interest Map, grounded in UDL principles, in allowing flexibility to respond to learner variability (CAST, 2024). Some examples of adaptations included the length of Interest Map sessions, the facilitation of individual and group interest-based learning sessions and the inclusion of peers from the mainstream class by one teacher in Interest Map sessions. The researcher evaluated the implementation of the Interest Map using a framework adapted from criteria proposed by Dusenbury et al. (2003) and Rojas-Andrade and Bahamondes (2019) to reflect further on the quality and success of the intervention (Table 3.2).

Table 3.2*Implementation Science Framework*

| Criterion | Definition | Application |
|------------------------------|---|--|
| Fidelity | The adherence to theoretical guidelines and practical components specified in the intervention design | <ul style="list-style-type: none">• Teachers were provided with implementation guidelines and a checklist created by the researcher.• Review of the video-recorded sessions allowed the researcher to assess implementation fidelity.• The researcher engaged in ongoing dialogue with the teachers throughout the intervention to support implementation fidelity. |
| Exposure to the Intervention | The number of intervention sessions facilitated | <ul style="list-style-type: none">• The Interest Map was implemented by teachers over a five week period and a realistic number of sessions were negotiated to provide clarity on time commitment.• The researcher reviewed the video-recordings to corroborate teacher report of the number of sessions completed.• The Interest Map formed part of the children’s typical curricular experience and aligned with pedagogies, approaches and planning processes already in place. |
| Quality of Delivery | The level of competence of the interventionist | <ul style="list-style-type: none">• The Interest Map was delivered by teachers who had experience teaching within a special class setting and had expert pedagogical and curriculum knowledge.• Implementation of the Interest Map was complemented by strategies already in place within the child’s learning experiences such as visual schedules, sensory strategies and social communication supports.• The teachers had developed a rapport and long-term relationship with the children and had an in-depth understanding of their behaviours, strengths, needs and preferences. |

| | | |
|----------------------------|---|---|
| Participant Responsiveness | The degree to which participants were committed and receptive to the intervention | <ul style="list-style-type: none"> • The researcher maintained contact with the teachers throughout the intervention period to monitor implementation and make adaptations as required. • Teachers and parents responded to invitations to participate voluntarily and demonstrated initial interest in the intervention. • Based on observation of video-recorded sessions, the children appeared responsive and enjoyed participating in the intervention. This was corroborated by teacher reports on children’s positive response to the Interest Map. • Teachers reported on the acceptability and feasibility of the Interest Map and reflected on their experience of implementation during the reflective dialogues. All teachers indicated that they would use this approach in their future practice. |
| Programme Differentiation | The degree to which the intervention is targeted, indicative or universal. | <ul style="list-style-type: none"> • In the context of this research, the Interest Map was implemented as an individualised, targeted intervention. • The Interest Map could be adapted flexibly to align with different curricular targets and profiles of strengths and needs, as well as being adaptable to suit individual classroom contexts. • Some participants noted opportunities to extend the Interest Map to include other Autistic and non-Autistic peers, thus illuminating the potential for its use as a Universal Design for Learning approach. • Figure 4.2 outlines how the Interest Map has cross-curricular applications and can be adapted for use as a universal, indicative and targeted approach. |

3.6.6.4 Semi-structured Interviews. Semi-structured interviews were selected as an appropriate methodology to provide opportunities for parents and teachers to express their views relating to absorbing interests (Adams, 2015; Roberts, Nowell & Nie, 2019). Open-ended questions and general topics for discussion were drafted by the researcher, informed by the research questions and literature review (Appendix N), whilst flexibility was allowed to initiate follow-up probes and facilitate spontaneous discussions. One-to-one semi-structured interviews were employed and participants were offered the choice of engaging in face-to-face or online interviews using Microsoft Teams to accommodate individual communication preferences.

3.6.6.5 Reflective Dialogues. Reflective dialogues promote collaborative thinking and critical reflection based on the assumption that multiple shared perspectives have the potential to shape understandings and instigate change (Digby, 2017). Teacher participants selected a series of video-recorded clips as stimuli for reflective dialogues, with the researcher acting as facilitator. The “ALACT” Model (Korthagen et al., 2001) was used to guide the reflective process (Table 3.3). This approach valued the teachers as experts in pedagogy and in their knowledge of the child, therefore allowing them to co-create and enrich understandings with the researcher within a collaborative space (Cherrington & Loveridge, 2014; Digby, 2017; Gorman & Hall, 2023; Moyles, Adams & Musgrove, 2002). Interpretative validity was enhanced by the researcher and participants viewing and reflecting on the recorded data, identifying notable observations and reflecting on meanings and interpretations attributed to these observations (Moyles, Adams & Musgrove, 2002). This enabled teachers to critically reflect on their experience of the intervention, considering its impact and feasibility (Cherrington & Loveridge, 2014). Moreover, the researcher could draw on observed facilitators and barriers, thus increasing the transformative nature of the findings (Digby, 2017) and their implications within the field of educational and child psychology.

Table 3.3*The “ALACT” Framework for Reflective Dialogues (Korthagen et al., 2001)*

| Phase | Description |
|---------------------------------------|--|
| Action | A probe or artefact is used to guide the reflective process. |
| Looking back | The teacher reflects on the experience. |
| Awareness of essential aspects | The teacher and researcher identify teachable moments and points of interest for discussion and reflection. |
| Creating alternative models of action | The teacher and researcher discuss facilitators and barriers of the intervention, co-creating actions and solutions. |
| Trial | The teacher implements learnings from the reflective dialogue process. |

3.6.7 Pilot Study

Data collection methods were piloted to determine their feasibility, accessibility and acceptability, and to refine procedures that did not elicit appropriate responses or relevant data (Cresswell & Poth, 2016; Castillo-Montoya, 2016; Malmqvist et al., 2019). This involved carrying out a child-led session using the Mosaic Approach with two Autistic children who were not participating in the full study. As part of the pilot study, the researcher sought expert review from an Educational Psychologist who works with Autistic children and from her supervisors, who also have experience working with Autistic children in educational practice and research, to validate the Ideal Playtime Drawing Task (Appendix K). The interview schedules were considered by the researcher, supervisors and panel members during a Progression Panel in March 2024, and some questions were reworded and merged. Pilot interviews were facilitated with a teacher who had experience teaching in an Autism class and with a parent of an Autistic child. Participants for the pilot interviews were invited to participate on a voluntary basis, having received a copy of the information sheet and consent form.

Based on feedback and the experience of the pilot study, amendments were made to the data collection methods (Malmqvist et al., 2019). Having trialled the completion of child-led sessions in pairs and individually, it was decided that individual conferences with children

were most conducive to developing rapport and recording data authentically. The researcher also realised the importance of using strategies to support engagement including movement and sensory breaks, choice in activities and a visual schedule (Appendix O) to increase predictability, all of which are recommended in best-practice guidelines (National Institute for Health and Clinical Excellence (NICE), 2021). Additionally, a visual was added to the Ideal Playtime Drawing Task, to support children’s understanding of the concepts “would like” and “would not like”. Within the interview schedules, probes on the positive and negative effects of absorbing interests were augmented, such as encouraging participants to provide specific examples and elaborate on the topography of behaviours. An additional question was included in teacher interviews around gender-based differences in absorbing interests. The researcher also reflected on the importance of language within questions, for example avoiding leading questions or questions with an evaluative tone, as well as being cognisant of terminology used by parents to describe Autism and adapting to suit their preferences, as recommended in neuro-affirmative practice (Bury et al., 2023; Fecteau et al., 2024).

3.6.8 Ethical Considerations

The researcher obtained ethical approval from Mary Immaculate Research Ethics Committee (MIREC) (Appendix P). The study adhered to The Psychological Society of Ireland (PSI) Professional Code of Ethics (2019) and Children’s First Act (2015). Teachers and parents participating in the study received an information sheet which provided details on the nature and purpose of the research, as well as identifying risks and benefits associated with participation (Appendix Q). Having read the information sheet, participants were asked to complete a consent form prior to data collection (Appendix Q). A child-friendly information sheet and accessible assent form were shared with children prior to data collection (Appendix Q). In advance of the child-led conferences, the researcher provided each child with a visual which they could use to communicate if they wished to take a break, stop the session or if they did not understand a question (Appendix O). Inclusive practices were therefore embedded within the methodology (Lewis-Dagnell, Parsons & Kovshoff, 2023). Assurance was provided on confidentiality and safeguarding of children in relation to the video-recorded data. All data gathered were anonymised and stored securely. Data will be retained in accordance with MIC data retention policies.

3.6.9 Data Analysis

Stake (1995) describes two strategic approaches to data analysis: Categorical Aggregation, which involves organising data across cases into themes based on shared attributes or patterns, and Direct Interpretation, which focuses on interpreting specific details within a case. Both strategies were used in the current study to achieve a balanced approach to data analysis (Stake, 1995).

3.6.9.1 Reflexive Thematic Analysis. Data from semi-structured interviews and reflective dialogues were transcribed verbatim and systematically coded using the data management system NVivo 14 (Lumivero, 2023). This supported implementation of a systematic coding process, as well as facilitating clear documentation of the multiple layers of abstraction and evolution of codes into themes (Appendix R), thus increasing transparency and demonstrating rigour (Byrne, 2022; Cresswell & Poth, 2016; Roberts, Dowell & Nie, 2019). Subsequently, data were analysed using a predominantly inductive approach which adhered to the six phases of Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2019; Byrne, 2022) (Table 3.4).

Table 3.4

Stages of Reflexive Thematic Analysis (Braun & Clarke, 2021)

| Phase | Description |
|---|---|
| 1. Familiarisation | Read and re-read the transcribed data, insert notes, comments and highlight points of relevance to the RQs. |
| 2. Systematic Data Coding | Assign codes to pieces of data and track context of codes. |
| 3. Generating Initial Themes | Combine codes based on shared meanings to generate initial themes. |
| 4. Developing and Reviewing Themes | Review the themes in light of the RQs and develop a coherent narrative. |
| 5. Refining, Defining and Naming Themes | Refine themes and develop informative, concise names for each theme. |
| 6. Writing the Report | Address the research questions and contextualise the data within extant literature. |

RTA involves open-coding whereby the researcher searches for patterns without pre-conceived ideas or frameworks and allows themes to emerge from the raw data (Braun & Clarke, 2021; Roberts, Dowell & Nie, 2019). RTA harmonises with both the constructivist paradigm and qualitative design employed in this study, as it embraces individuals' subjective experiences and interpretations of the world (Byrne, 2022; Roberts, Dowell & Nie, 2019). As well as valuing the role of participants in constructing knowledge, RTA highlights the researcher's active involvement in co-creating meaning through "reflective and thoughtful engagement with the data and the analytic process" (Braun & Clarke, 2019, p. 594), thus echoing the interpretative principle of Stake's (1995) methodology. In accordance with the constructivist epistemology underpinning this research, meanings participants attributed to their experiences of absorbing interests were prioritised in the development and interpretation of codes (Braun & Clarke, 2021; Byrne, 2022). A combination of both semantic and latent coding approaches were used, as the researcher coded based on explicit meanings conveyed by participants and examined implicit meanings and assumptions (Braun & Clarke, 2021; Byrne, 2022).

3.7 Results

In the following section, findings of the qualitative data analysis are presented thematically (Figure 3.4) and supplemented by artefacts collated during the research process. Pseudonyms are used to identify all participants (Table 3.5).

Table 3.5

Overview of Participant Triads

| Triad 1 | Triad 2 | Triad 3 | Triad 4 |
|----------------|----------------|----------------|----------------|
| Parent 1 (P1) | Parent 2 (P2) | Parent 3 (P3) | Parent 4 (P4) |
| Teacher 1 (T1) | Teacher 1 (T1) | Teacher 2 (T2) | Teacher 3 (T3) |
| Amelia | Callum | Liam | Dylan |

Figure 3.4

Thematic Map



3.7.1 Absorbing Interests as Pathways to Social Engagement

3.7.1.1 A Social Bridge. Participants identified that absorbing interests serve as vehicles for social growth, connection, and engagement for Autistic children. In particular, the supportive nature of absorbing interests in helping children to initiate social interactions and form connections with family and peers was identified. Liam referenced his friendship with a peer in the mainstream class, noting we “*talk about Pokémon together*”. Similarly, in the Ideal Playtime Drawing Task, the children identified play partners (Figure 3.7). Teachers and parents described the children’s eagerness to share information and engage in activities relating to their absorbing interests with others across home and school contexts.

Interestingly, some were described as being more overt with their absorbing interest than others. T1 attributed this difference to the child’s personality “*we’ve had children who have had a special interest, but I suppose even though it’s been a strong special interest, you don’t hear as much about it because they’re much quieter*”. This teacher also perceived age to be a factor, as children can “*become more self-aware as they get older*”. P4 echoed that her child has become more self-conscious and perfectionistic about his drawings in recent years. Nonetheless, this parent reflected how having shared interests may support him in forming social connections in the future: “*even as he gets older, you know he’ll be meeting different people and be able to hold his own*” (P4). In general, the children were described as being at ease in conversations relating to their interests. T3 reported that he sees a playfulness in the children when they are engaging in absorbing interest activities that may not otherwise be evident: “*it’s often linked to their interests, that silliness wouldn’t be there only when they’re maybe drawing together or they play these characters together*”.

Teachers also identified that the Interest Map intervention offered opportunities to work one-on-one with the children and share enjoyment: “*I think she really enjoyed that aspect of it and the fact that she was getting a bit more attention*” (T1). Herein, the potential of the Interest Map to support teachers in getting to know the child and building rapport was referenced. This was further conveyed by a description of the co-creation and implementation of the Interest Map as being “*a good way into their world*” (T1). In addition, the Interest Map facilitated opportunities for group work and interactions with peers, which teachers felt was significant for the children’s social development: “*he got an opportunity to interact with his peers because he’s craving that, you know, that was a big thing for him at the start of the year that he felt that he had no friends that, you know, his mam was saying that that he really was struggling socially*” (T1).

3.7.1.2 They open new doors and create windows of opportunity. As well as facilitating social interactions, absorbing interests unlock a range of activities for the children such as carrying out research, watching videos and reading books, playing video games, and engaging in play and art activities relating to the interest (Figure 3.5). Many children referenced attending extra-curricular activities and clubs relating to their interests, thus providing further social outlets. In addition, the children seized opportunities to integrate their absorbing interests in other activities “his dance teacher let him bring his puppets and then incorporate one of those into the dances” (P4).

Figure 3.5

Artefacts of interest-based activities



“At home I like Pokémon books, I have so many I don’t know how much. I play with Pokémon figures too, I keep them in a box and play with them outside” – Amelia.



“I like Lego and I really like ships” (Callum)



“Dogman books give me ideas for my stories and drawings” – Dylan.

In the case of some participants, links were discerned between the interests and future ambitions and career prospects. For instance, Amelia shared that she *“would love to go to Pokémon tournaments in different countries one day”*. Dylan’s parent described how his interest in animation could provide lifelong opportunities: *“I explained, that’s what people do in Disney. They do drawings and he was like cool, I could actually do that!”*. She conveyed views that interest-based approaches provide accessible avenues into learning and unveil new possibilities in education systems: *“traditionally we have been focused on academic students and the points system...but like that isn’t the way forward now. There should be other avenues for people to get in and yeah, because a lot of people, you know that maybe didn’t have the best Leaving Cert, but they’re passionate about their career and they enjoy it”*. This parent also discussed having to challenge uninformed perceptions of her child’s future prospects, describing how unfair assumptions are often made about his potential on the basis of his Autistic identity: *“some people thought I was crazy because I said Dylan can go to college in our town because they do animation and others are like, you think he’ll go to college? And I was like, well, why won’t he?”* Nonetheless, the parent asserted her belief that her child should have equal opportunities to his siblings and peers, powerfully stating, *“Dylan will have the same dreams and aspirations as a child in mainstream”*.

3.7.1.3 Bridging the Gap: A Shared Responsibility. Many family members were identified as being supportive of the children’s absorbing interests. Participants described connections when family members had enjoyed similar interests in their childhood: *“I play with my uncle and my best bro, they used to play Pokémon when they were younger”* (Liam). Others having knowledge relating to the interest was emphasised as a core component of positive interactions: *“My niece and nephew would have been into Pokémon when they were younger, so they would talk to her about it and she loves that when they have an interest and*

they understand (P1); “obviously like my brother is interested in it so he can engage with him in a certain way” (P2). Instances of peers responding positively to children’s interests were also highlighted: “anytime that Amelia is doing anything to do with Pokémon and stuff like that, like they're really, really understanding of it. And they promote it actively” (T1).

Conversely, participants identified that children’s absorbing interests sometimes differ significantly from interests of their peers: “I don’t think too many his age are into that” (P3). This was reiterated by P1: “I think there's only the odd few that would know about it, that she feels comfortable talking about it”. Parents and teachers admitted that they often lack the knowledge to share meaningful interactions with the children on their areas of interest. Amelia’s mother recalled a time when her husband struggled to pronounce the names of Pokémon characters, and Amelia responded, “Daddy you don't understand them then, do you?”, perhaps illustrating her awareness of the limits of the interaction. The following example shared by P2 captures the mutual frustration experienced by both parent and child and the Double Empathy Problem in action: “you’d get a ‘you never listen to me’ kind of thing and I’d say it's not that I don't want to listen to you it's just you've told me this. And it was the same thing that he was telling me, and it wasn't even a different way, it was the exact same”.

Parents and teachers seemed to identify the intensity of the interest as a barrier to social engagement at times. The dearth of context provided or the child’s apparent lack of awareness of the other in the interaction can lead to break-down in communication: “he's just throwing the information at you for the sake of throwing information at you and it's not an interaction...he'll just bombard whoever he's talking to with information that comes from nowhere” (T1), “then he doesn't let the other person get their point across...we’d try to change the subject and he’d just be gone then. He would just walk away” (P2). Reduced motivation to interact with others who did not share their interest was mentioned: “he knew Edward had no interest in the Titanic or anything, so he would not care” (P2); “if the person says, they, don't like Pokémon, he shuts down” (P3). There were perceptions that others not sharing their interests could be difficult for the child to understand: “if the other person isn't too keen on it, he can get a little upset and he's like why?” (P3). Relatedly, Liam appeared to make assumptions of others based on their attitudes towards Pokémon, noting that “whoever plays Pokémon is cool”. Parents identified the challenges associated with this, and described how they tried to extend their children’s perspectives: “that’s what we’re trying to teach him,

you know it's ok if someone doesn't like Pokémon, it doesn't mean they're not nice" (P3); "we know you love it, but not everybody is interested in the same thing you're into" (P2).

3.7.2 A Snapshot into the Autistic Experience of Absorbing Interests

3.7.2.1 It's Part of Who I Am. All participants highlighted that the absorbing interests are experienced as a central and omnipresent part of who the children are, infusing every aspect of their lives: *"if you talked to anyone, everyone in school would know that Amelia has a strong interest in Pokémon" (T1).* The interest often *"becomes part of the whole family and everyone kind of has to adapt around it" (T2).* Reflecting on the origin of the interest, many participants journeyed back to the child's early development, echoing a sentiment that the absorbing interest has always been there: *"from the time he was in infants to be honest with you. He's had that strong interest coming through" (T1).* Interestingly, many parents and children pinpointed a defining moment that sparked the emergence of the interest (Figure 3.5). For instance, Dylan recounted that he *"got into puppets two years ago, I saw a video and it amazed me, I wanted to be a puppeteer".* Similarly, Amelia recalled, *"I was in my child minders house and I saw Pikachu" (Figure 3.6).*

Figure 3.6

Artefacts depicting emergence of the interest



"I first started drawing when I was really little, when I was 3, but I got really into it when I was 7 and I got really good" – Dylan.



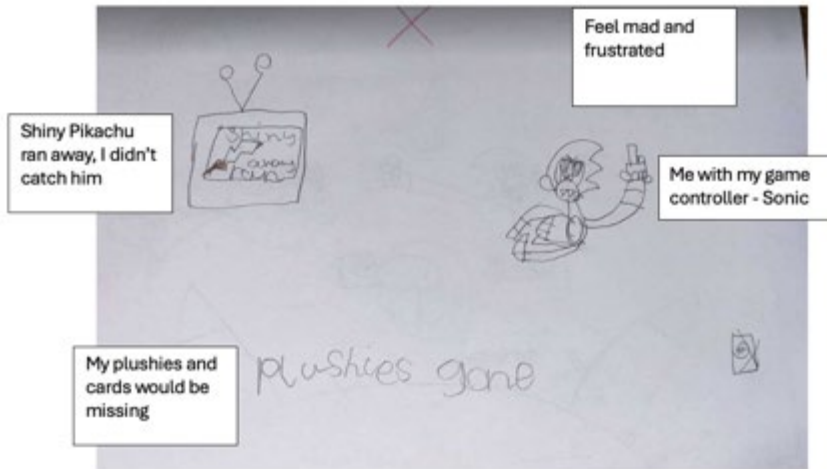
“Pikachu is my favourite. He was my first Pokémon plushie and I take care of him” “When I saw him for the first time he looked really cute. My friend, well actually he’s also my cousin, is also a fan of Pokémon and he introduced me” – Amelia.

Whilst all parents expressed that their child had absorbing interests from a very young age, some recalled that the nature of these interests had changed slightly as they moved through different developmental stages. Others gained new interests while retaining attachments to previous interests and returned to these at different stages. The extent of the children’s attachments to previous interests was conveyed in Amelia’s parent’s descriptions of the significance of her parting with Paw Patrol toys: *“I thought that was a huge thing because for years we had been suggesting it”*. Liam’s teacher recalled that he had a previous absorbing interest in Sonic the Hedgehog and as a young child in Junior Infants, *“he would not use his own first name. He was known as Sonic and that was it”*. Whilst Pokémon became a more overt area of interest for Liam in recent years, interestingly, during the child session Liam depicted himself as Sonic in his drawings (Figure 3.7). As well as conveying attachments to earlier interests, this perhaps exemplifies the inextricable link between the absorbing interest and this child’s sense of self.

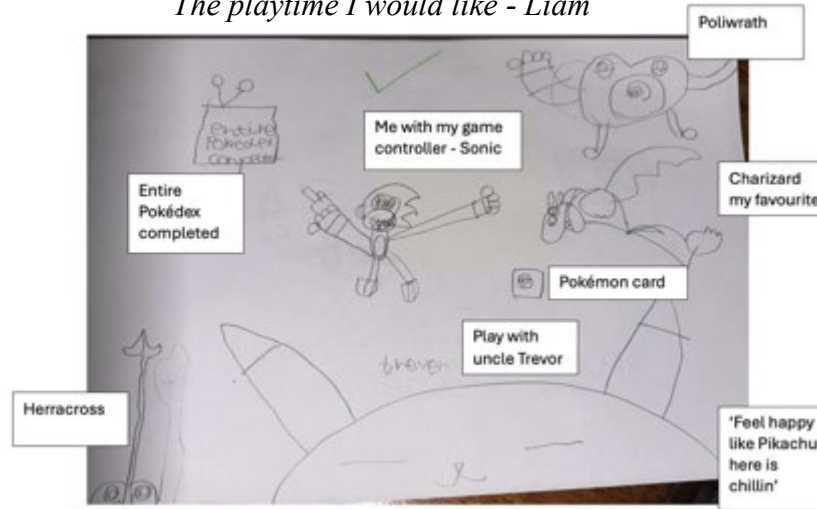
Figure 3.7

Artefacts from the Ideal Playtime Drawing Task

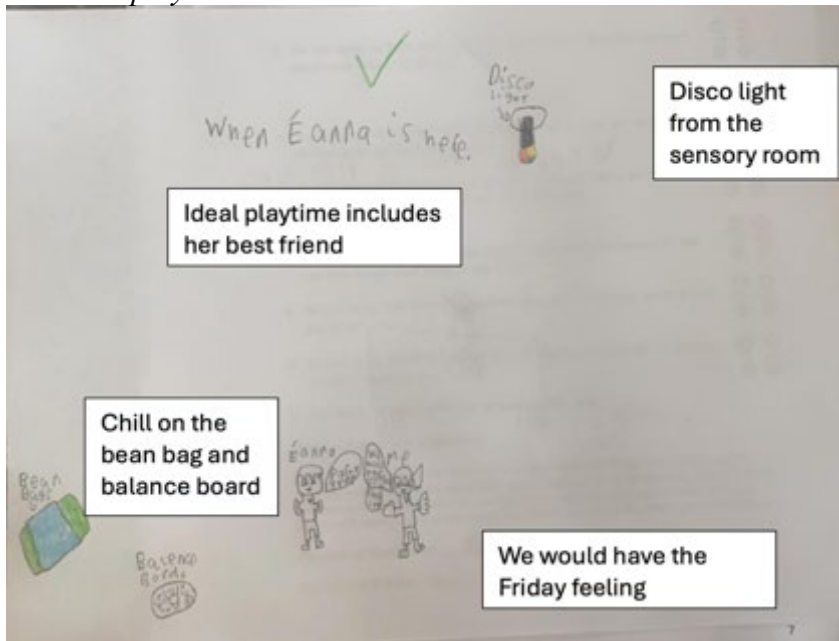
The playtime I would not like – Liam



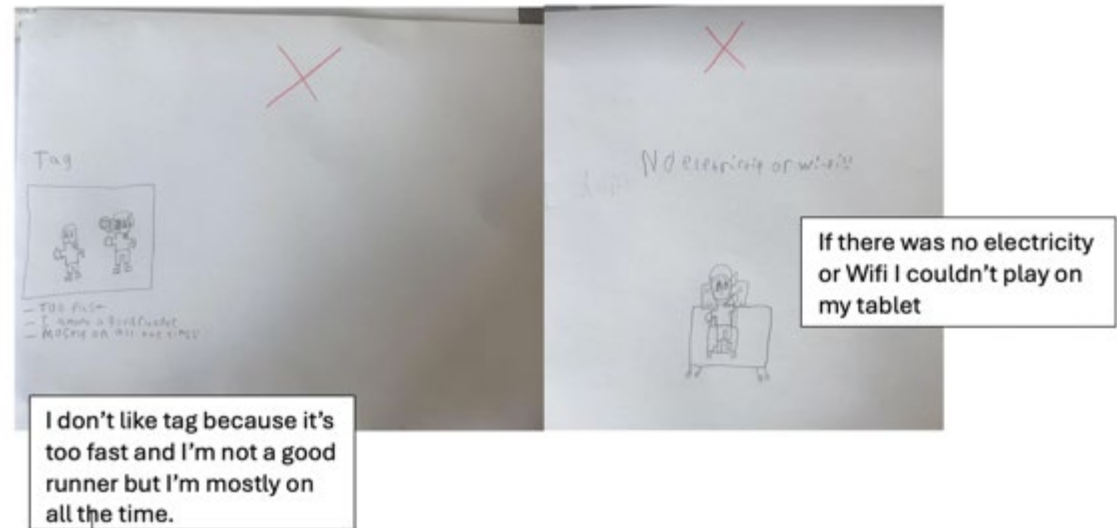
The playtime I would like - Liam



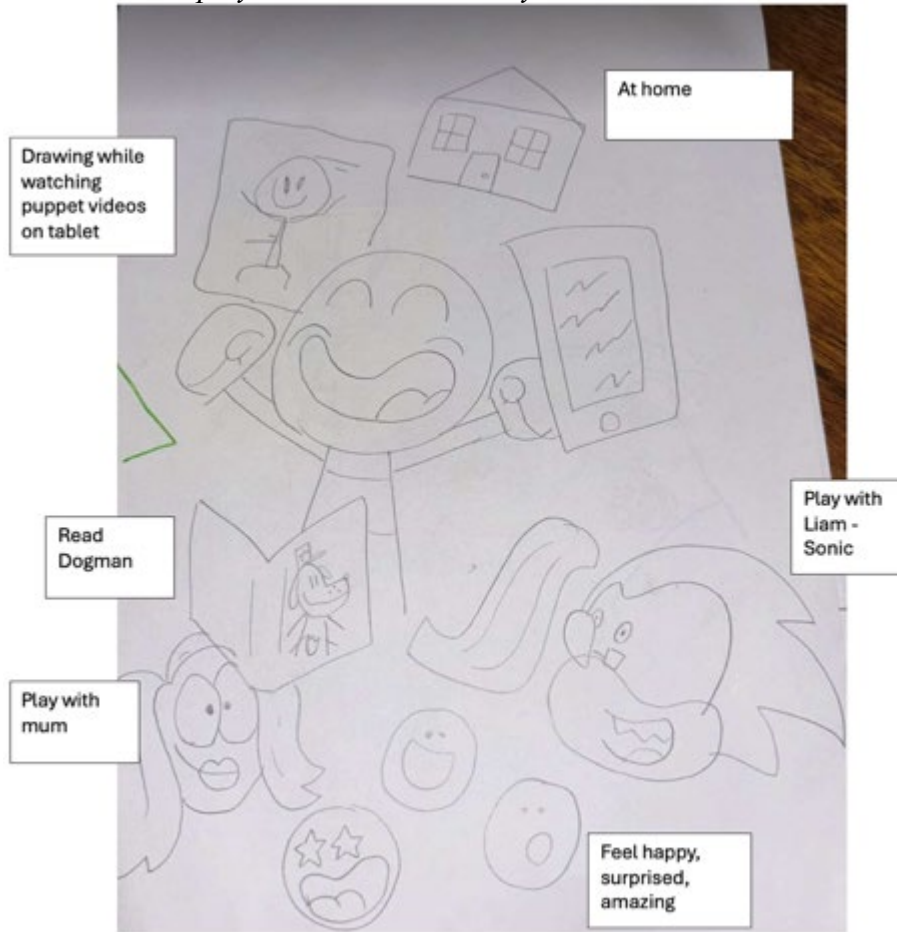
The playtime I would like – Amelia



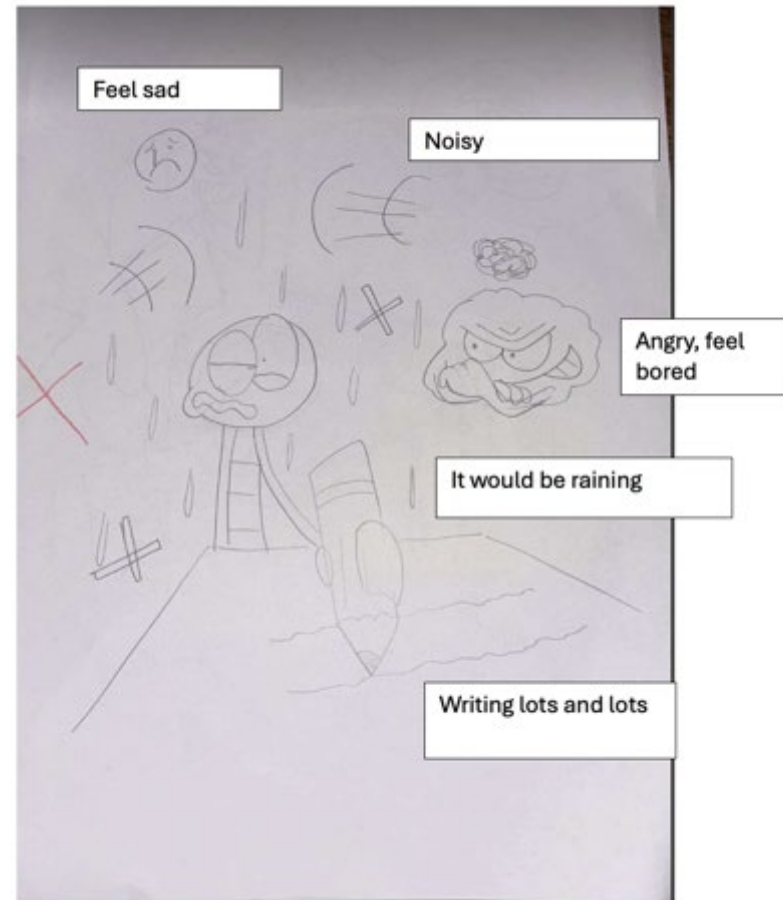
The playtime I would not like - Amelia



The playtime I would like – Dylan



The playtime I would not like – Dylan



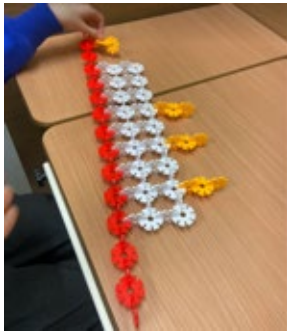
3.7.2.2 I am an Expert. Parents and teachers recognised that absorbing interests manifest as islets of aptitude for the children, who were referred to as experts in their area of interest: *“they'd be kind of as she calls it masters in Pokémon”* (P1). During the Mosaic Approach session, the children shared their specialist knowledge with the researcher with great enthusiasm, providing detailed explanations, using sophisticated topic-specific vocabulary and communicating an array of facts (Figure 3.8). The process of developing expertise appears to be implicit, as when asked how he knows so much about ships Callum stated: *“I just know”*. There was a sense of awe in parents and teacher’s descriptions of the children’s strengths: *“I thought his art was at an extremely high level, and the detail, I can just remember he could draw off the top of his head”* (T3). Absorbing interests were described as offering a window into the child’s capability: *“when he's doing things with his special interest you actually see his true intelligence come out”* (T3). The children’s level of expertise was portrayed as being unique and something that makes them stand out from others: *“it's a very specialist subject and not everybody's knowledgeable about it I suppose”* (P1). P2 highlighted how she perceives that her child is beginning to develop an awareness of this: *“I think slowly he's starting to become more aware of things like that, that his level of thinking compared to his peers is different”* (P2). Relatedly, parents and teachers acknowledged that the children’s knowledge on the topic of interest far exceeded their own, and that they often cannot keep up with the level of expertise that the children develop. Nonetheless, participants appeared committed to nurturing the child’s interests and strengths: *“I can remember someone saying to me when he was very small, whatever their strengths are, go with it, and this is one thing that he's never lost”* (P4).

Parents also recalled instances of others recognising the child’s expertise and aptitude: *“he was very happy to show some of the boys some of his work and they were like, Oh my God, Dylan this is really cool and this is brilliant”* (P4); *“when people first meet him they're like oh my God, he knows so much”* (P2). Parents perceived that the children experience a sense of pride as a result of being knowledgeable on their interest: *“she feels like that it gives her a bit of confidence that she can talk about it”* (P1). Opportunities to share their knowledge and teach others about their interest appeared to increase the children’s self-esteem: *“he was really happy in himself that...he'd shown them”* (P4). Teachers reported that they noticed an increase in children’s self-assurance during the Interest Map intervention, as prior knowledge on the topic appeared to support children’s confidence to participate in tasks

and volunteer answers. In particular, T1 noted that Amelia, who often struggles with low self-esteem, “*enjoyed um being the expert. And you know, knowing more than I did about things*”.

Figure 3.8

Artefact illustrating the child's expertise



“Britannic was a hospital ship during WW1 to nurse wounded soldiers. My grandad thought it was hit by a torpedo but this was propaganda. The newspapers got it wrong, that would have been a war crime, it was a water mine” – Callum.

3.7.2.3 It's All-Consuming. The children's experiences of their absorbing interests were portrayed as being all-consuming in nature, with many parents and teachers using terminology such as “*obsession*” and “*fixation*” to describe the interests. Parents portrayed that when their children hone in on their absorbing interest, it can “*completely take over*” and there are times when the child cannot think of anything outside of their interest. P3 depicted how Liam “*eats, sleeps and breathes*” his absorbing interest and perceived that he would share facts about his interest “*all day every day if he could*”. T1 conveyed that the children introduce their interest into many other activities: “*it doesn't matter what the activity is. If he has any free choice around an activity, he will bring ships or the Titanic into it*”.

This was perceived as challenging for parents and teachers to navigate at times. Whilst the importance of children having opportunities to access and relay information on their interest was acknowledged, it was evident that supportive adults sometimes felt overwhelmed by the intensity of the children's interests. They appeared to struggle with hearing the same facts and topics of conversation repeatedly each day: “*I think the only negative was just the impact it had on everyone around him when he was constantly talking about it*” (P2). Callum's parent expressed that the intensity of her child's interest in the Titanic can be “*draining*” at times, admitting, “*I can't even bring myself to watch the movie at the minute*”. Interestingly, Callum seemed to demonstrate some awareness of this when he

shared, *“Teacher wants me to stop talking about ships sometimes, he doesn’t want me to stop liking them but just not all the time”* and *“mummy doesn’t like Titanic all the time”*. Liam noted that he had to stop playing Pokémon Go *“so I can live because it’s so addictive you don’t want to know”*. Supportive adults articulated a desire for children to divert their attention to other areas, for example when they wished to engage in conversations with the child about other topics or find out information about their day at school: *“you need to focus on other things too and focus on other people’s interests and a conversation with other people that’s not going to be one-sided”* (P2).

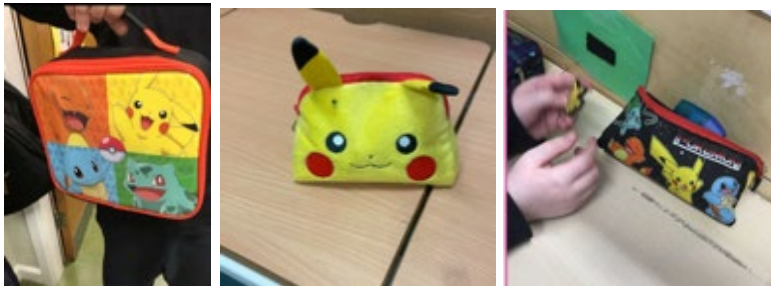
In addition, the intensity of absorbing interests was perceived as being overwhelming for other children at times: *“if another child doesn’t like Pokémon and he’s talking about it constantly, it can cause huge stress”* (T2). As a result, this teacher felt conflicted between balancing the needs of all children in the class: *“You don’t want a child to feel that they can’t talk like it is their interest and to them it’s their number one. But if it’s going to affect another child, you have to find ways around it”* (T2). Attempts to give children structured times to talk about their interest and encouraging them to deviate to other activities and topics of conversation were described. The goals of this diversion appeared to be well-intentioned, as parents and teachers thought it necessary to promote children’s skill development in domains such as communication and academic learning. However, parents acknowledged that many attempts at diverting the child’s attention were unsuccessful as they *“would try to go back to it and always went back to it”* (P2). Liam’s teacher reflected that in the past, he became dysregulated when he was required to transition away from his interest or when he could not access his interest for various reasons. Emanating from these experiences, T1 shared feelings of uncertainty in relation to the Interest Map prior to beginning the intervention, due to fears that it would intensify the child’s preoccupation with their interest and result in behaviours that challenge. T2 shared that the emergence of new absorbing interests evoked feelings of anxiety: *“I nearly had a fear of again adapting to a new interest, because it was a pure fixation”*.

Another dimension of absorbing interests portrayed as being all-consuming was the collection of merchandise including plushies, figurines, cards and other items. The children referenced their collections and showed the research items such as stationary, books, lunchboxes and schoolbags all linked to their absorbing interest during the Photo Voice activity (Figure 3.9). Parents described how children strive to complete *“the entire set”*, and depicted bedrooms decorated with interest-based themes. P3 shared, *“if his collection isn’t*

complete, that does cause a bit of anxiety and a bit of stress for him". P4 described similar experiences whereby her child becomes consumed with tracking items ordered online and finds it difficult to cope with the uncertainty of waiting. The expense associated with maintaining these collections was referenced by all parents. In particular, parents noted that the children often lack understanding of the financial cost that this incurs.

Figure 3.9

Artefact depicting a child's collection



"Everything I have is Pokémon" – Liam.

3.7.4 Safety, Light and Growth in Emotional Wellbeing

3.7.4.1 A Coping Tool. Absorbing interests were identified by parents, teachers and children as having a regulatory function. Parents perceived that engaging with absorbing interests may provide a safe space for the children, acting as a retreat from reality: *"I think as well with him it can be a bit of escapism and that he's like, I can black out anything else"* (P3); *"she kind of goes into her own little world, but I find that relaxes her for some reason. You know, if she's had a bad day at school"* (P1). Amelia appears to rely on her absorbing interest during times of transition or stress, using it as *"a little crutch to help her when she feels a bit uneasy or, you know, a bit anxious going into a situation that she wouldn't be used to."* (P1). This sentiment was echoed by Amelia herself, who reported that she watches Pokémon videos or plays online Pokémon games at lunch when her best friend is absent from school, and that she likes to bring her Pikachu toy to art therapy sessions. Parents differed in their perspectives on children's reliance on their interest as a source of comfort. P4 expressed fears that over-dependence on the interest may act as an *"enabler"*. Conversely, P1 asserted that they support any strategy that regulates their child, sharing that they: *"always include her little teddies. And if we were going anywhere we'd never forget them and, you know, we would make an issue of it like to include everybody and have everything with us that would make her happy in any situation"* (P1).

For three children, reenacting scenes relating to their absorbing interest appears to facilitate processing of difficult situations and promote self-regulation. Parents have observed their children acting out situations that happened in school using figurines, teddies and puppets relating to their interest: *“if he wasn't happy about something and the puppet could be the other person and Dylan might be, I suppose, giving his perspective. And if I ask him about it, he might not tell me what's happened...And he would say yeah, mum, you don't need to worry about it, you know, I'm working it out”* (P4). During the Mosaic Approach, Callum chose to act out a scene of the Titanic sinking using a model that he had built and incorporating dramatic gestures, vocal sounds, and an emotive tone of voice. Reciting scripts from television programmes relating to their interest were also identified by parents as strategies used by children when they are distressed. Absorbing interests therefore appear to act as a coping tool for the children, enabling them to attain a sense of calm in challenging environments.

3.7.4.2 A Source of Happiness. Absorbing interests appear to be associated with positive affect and enhanced emotional wellbeing. All parents agreed that the absorbing interest had a mostly positive impact on the child and the family. In the Ideal Playtime Drawing Task, children described feelings of happiness when engaging with their interests (Figure 3.7). In particular, Dylan articulated, *“I feel happy it's just that I don't really know, something in me makes it feel good”*. Following the Mosaic Approach session, Liam shared an impactful sentiment with the researcher stating, *“that was the best thing that's happened in this class”*. In terms of the Interest Map, teachers observed children's positive emotions and higher levels of enjoyment than children would typically exhibit during lessons in the same curricular area: *“ he would be more prone to getting frustrated very easily and giving up very easily, whereas when we were doing this intervention, he didn't get frustrated”* (T1). This teacher also felt that the Interest Map activities *“set Callum up for a positive day... because he had a good start to his morning, his form was definitely better on those days as a result”*. Parents echoed that they also notice the positive impact of absorbing interests on their children's mood. P4 conveyed that she supports the absorbing interests because her child's happiness is the most important thing to her, particularly as she perceives that some Autistic children can experience mental health challenges.

3.7.4.3 Emotional Literacy Development. Teachers reported gains in the children's emotional literacy and regulation skills when concepts were linked to their absorbing interest, such as exploring emotional states and experiences using preferred characters. Similarly, opportunities presented for the children to use their interests as a mechanism for resolving social scenarios: "*When the puppets were there one day we used them and got him to kind of talk through it* (T3). T2 shared an example from the Interest Map intervention, whereby the child coped better than usual when he did not win a game, attributing this improvement to the regulatory function of his absorbing interests.

3.7.5. *An Asset for Learning*

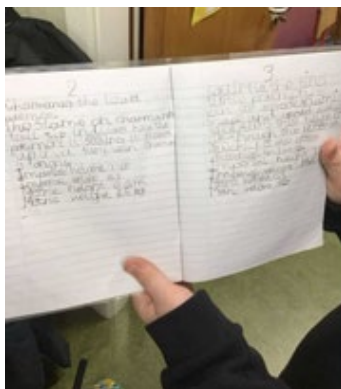
3.7.5.1 A Way In. All teachers acknowledged that it can often be difficult to engage the children in learning, as they find it challenging to focus and can zone out or demonstrate reluctance to participate when they are not interested in a topic. Conversely, the power of absorbing interests in promoting Autistic children's motivation and engagement was highlighted. Some parents and teachers reported that offering access to interest-based activities following completion of unpreferred tasks such as homework or writing is often an effective incentive and motivator. For some children, access to their interest needs to follow immediately after completing the task, whilst T2 described how she encourages positive behaviour throughout the week using an interest-based reward system. Notably, the absorbing interest appeared to be more motivating than other rewards or activities such as use of multimedia resources, interactive games and Information Technology.

In relation to the intervention, teachers observed enhanced engagement and persistence, as children sustained attention for longer periods during interest-based activities: "*he would never really be able to focus for that long usually*" (T1). All teachers reported that as well as increased motivation and sustained attention, they observed increased independence in task completion. Whilst children typically required frequent breaks, incentives and reminders to stay on task, when the activity related to their interest, their need for adult prompting greatly reduced, with one child asking the teacher if he could continue the task after his lunch. Dylan also described feelings of autonomy when engaging with his interest: "*You can let your imagination do what you want, you can think about what you want*". A change in the children's mentality towards academic tasks was observed during the Interest Map intervention, as all children appeared more enthusiastic: "*if he looked at a full page usually, oh the thoughts of it would kill him, but then with this it's like 'I can do this'*"

(T2). Two teachers attributed this shift in mindset to the idea that the children did not perceive Interest Map activities as “work”. This was exemplified by Dylan asking his teacher “*so when are we doing English?*” after just completing a 40 minute long writing lesson relating to his interest. Subsequently, teachers noted that the quantity and quality of children’s written work increased when tasks were related to their interests. This was illustrated by Liam proudly showing the researcher the length of a story he had written about Pokémon during the Photo Voice activity (Figure 3.10). Similarly, Dylan’s teacher shared that when “*writing a story or writing a play script (he) surpassed the targets even of engagement and the quality of what he was writing*”. The potential for children’s enhanced motivation and engagement to be harnessed to support areas of difficulty was identified as a useful component of the intervention. For example, both parents and teachers described how the children’s preoccupation with books relating to their interest had previously facilitated development of reading skills: “*the reading was just amazing because he wouldn't read a book, ever. And those Pokémon books just sparked something in him and that was it*”. Importantly, teachers acknowledged that interest-based activities did not automatically result in improved skills, achieved targets or reduce the level of difficulty children experience in the case of subjects they find challenging. Rather, they facilitated increased engagement which can act as a vehicle for building capacity over time.

Figure 3.10

Artefact depicting a child’s written work



“This is my Pokémon story, Charizard is the best, no question” - Liam

3.7.5.2 Interest-based Learning in Practice. Teachers reflected on opportunities to use interest-based learning in their practice, acknowledging that the experience of implementing the Interest Map broadened their perspectives on the benefits associated with absorbing interests. This included perceived potential to use interest-based learning both individually, and as a whole class approach by intermittently incorporating different children's interests in learning experiences. Supportive adults considered it important that the children are aware of and appreciate others' interests: *"if he can have other people with you know, different interests, it will broaden his horizons"* (P4). In addition, teachers identified opportunities to extend children's interests and use them as a vehicle for deeper learning: *"I'm going to say start with ships, but then broaden it out to the wider area around the sea, you know, and then maybe to animals in the sea"* (T1).

All three teachers reported that they would be interested in using the Interest Map again in the future: *"it is a format that I would be interested in recreating for kids who have special interests going forward and I think it's a, it's a really good pathway into their life, into their world"* (T1). Teachers considered how they had not previously thought about the extent to which children's interests could be creatively aligned with curricular areas, particularly in the case of interests that are not inherently academic. T3 described the intervention experience as being *"an eye opener"*, asserting that he would *"take a lot from it"*. Parents described the Interest Map as being a positive, supportive experience for their children, and affirmed the impact of this on their family: *"that's why I think programmes like this are so important for people and for the child, but for the actual family unit as well because it means that there is somebody looking at it, that they're thinking ahead, because there's so many more kids in need of a unit or extra support in school that we need to think beyond that"* (P4).

3.7.5.3 Facilitators of the Interest Map. The Interest Map was described by teachers as being easy to implement. Whilst some teachers had trialled versions of interest-based learning previously, they felt that the Interest Map facilitated a more structured, cohesive approach: *"we knew some of the information, but to just get it all together, written down and have linked to the targets and everything. I think that was the key. You know, just having it all there and being able to kind of see it and being able to plan it rather than it being one off little lessons here or there"* (T3).

Effective planning and organisation appeared to be key factors contributing to successful implementation of the intervention. Teachers identified that designated time was required for planning and to “*get the whole picture in your head before you could go full steam ahead*” (T3). It was noted that although there is significant work, time and creativity required to collate resources linked to the child’s interest, online sources can provide many accessible options, thus reducing the need for teachers to create resources from scratch. T2 described that having resources prepared and organised in a folder was helpful. Flexibility to adapt the intervention to the individual classroom context was also required, as teachers emphasised the busy nature of classrooms, resulting in the need for dynamic approaches which can suit both individual and whole class formats. Implementation of the intervention over a longer time period and integration with long term plans were suggested to extend the impact and value of the work required. Herein, teachers recognised that the Interest Map aligns well with pedagogical approaches such as thematic teaching. T3 felt that expanding the intervention to include more children in the class would also be more resource efficient. T1 found it helpful to include peers from the mainstream class in group interest-based lessons linked to art, drama and science.

All teachers alluded to the need for structure and accommodations to support learning during the Interest Map intervention. For example, creating clear boundaries, designating spaces within the classroom and clarifying expectations using social stories and explicit explanations were identified. Teachers acknowledged the supportive nature of previous work in emotional regulation, social communication and academic learning, as children built on these foundational skills during the intervention period. In addition, established rapport and knowing the children well were deemed important. The need to allocate time to the Interest Map on the children’s visual schedules was highlighted. As well as ensuring that activities were prioritised, this increased predictability for the children and aligned with their preference for routine. The placement of Interest Map activities within the schedule was considered such that children were not required to move directly to an unpreferred activity. T3 described how he avoided “*any sudden changes*” and ensured that children had access to a sensory break or free choice activity after Interest Map sessions to support regulation before transitioning to another activity. During the Mosaic Approach, children themselves identified visual supports, such as schedules, choice boards and activities in the sensory room as being important aspects of their classroom experience (Figure 3.10).

Figure 3.10.

Artefacts of supports identified by children



“I like going to the sensory room with my friend it’s really nice. There’s loads of different things there, a bean bag, disco light, exercise bike, trampoline, balance board, peanut ball, you can lie and roll on it, it’s like a fun ball but also for exercise” (Amelia).

“If we have the Friday feeling and are feeling crazy it is calm and makes us happy. We can party with the disco light and dance too. The other sensory room is very small, I like this one better because it’s bigger” (Amelia).



“If it’s too noisy in the classroom I move in here (sensory room) or at my station” (Callum)

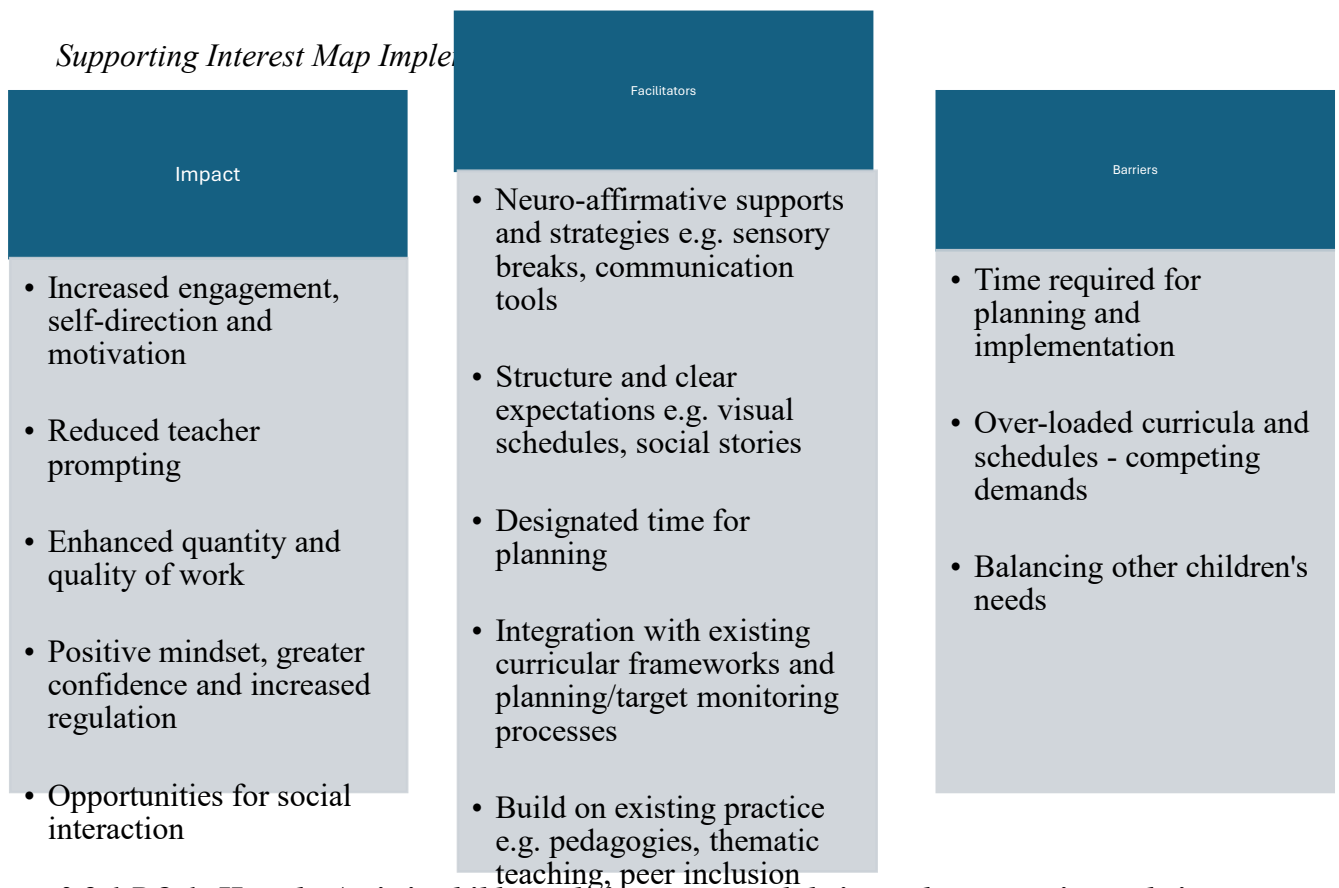
3.7.5.4 Barriers to the Interest Map. Time constraints were identified as the main barrier to the intervention. Teachers acknowledged that one-to-one sessions with the children were required to facilitate some activities, particularly in the early stages of the intervention. Teachers also highlighted that not all activities were conducive to group lessons, and at times it can be challenging to meet the individual needs of all children within the class. T2 emphasised that the dynamics of the group must be considered when planning lessons: *“I went to do it as a group lesson...and the rest of them were like no I’m not doing that”*. Further obstacles to effective implementation included the already loaded nature of classroom schedules and timetables, due to demands on teachers to implement a variety of interventions, as well as teaching a broad and balanced curriculum: *“there’s so many different things and with the best intentions in the world just some days it didn’t work out”* (T1). T1 felt that starting the intervention at the beginning of the year would help to mitigate this. T3 spoke about feeling conflicted between covering prescribed curricula and facilitating child-led learning: *“I suppose this is the difficulty with being in a special class. Like are you trying to complete all the curriculum or you know, are you trying to get enjoyment and engagement or you know balance it a little bit”*. Other barriers included the child’s mood on a given day, influenced by variables including tiredness, emotional overwhelm or changes in routine.

3.8 Discussion

Aiming to address the dearth of qualitative research conducted on absorbing interests, this study prioritised the subjective experiences of Autistic children and their supportive adults. In doing so, it explored how Autistic children, their parents and teachers experience their absorbing interests, as well as delineating the impact and feasibility of implementing an Interest Map intervention within a special class for Autistic children. In the following section, the qualitative findings will be synthesised and interpreted in light of the RQs and situated within existing literature and theoretical frameworks. Figure 3.12 summarises the impact and feasibility indicators of the Interest Map to support future implementation.

Figure 3.12

Supporting Interest Map Imple



3.8.1 RQ 1: How do Autistic children, their parents and their teachers experience their absorbing interests?

Based on the lived experiences and perspectives of Autistic children and their supportive adults, the current findings complement previous research offering an alternative to the traditional pathological view of absorbing interests as limited, repetitive fixations (Boven, 2018; Goldfarb et al., 2021; Tansley, Parsons & Kovshoff, 2022; Wood, 2023). Interestingly, in the current research the absorbing interests of children aligned with topics considered to be within the realm of “typical”. This somewhat contradicts the portrayal of absorbing interests as being idiosyncratic and highly restricted in previous research (Anthony et al., 2013; Klin et al., 2007; Turner-Brown et al., 2011). Although there was sometimes a repetitive quality to the ways in which children engaged with their interests, these interests did not appear to be restricted, as they facilitated engagement in diverse activities. Moreover, participants identified scope to extend the children’s interests to related topics and integrate them with a range of curricular areas and skill domains. As well as reframing societal understanding, these findings have potential clinical implications when considering how the Autistic experience of absorbing interests is conceptualised in the literature and identified according to diagnostic criteria.

Findings of this research reinforce that Autistic children appear to experience their absorbing interests as a core part of their self-concept (Gunn & Delafield-Butt, 2016; Harrop et al., 2019; Murray, 2018; Tansley, Parsons & Kovshoff, 2022; Winter-Messiers, 2007). The central role of absorbing interests in the child's life and sense of self was conveyed within the children's own perspectives, as well as being recognised and respected by parents, teachers and peers. Participants portrayed that absorbing interests are omni-present in the child's life and become part of the family. This reiterates the importance of valuing the child's absorbing interests as a crucial element of neuro-affirmative practice and validating Autistic identity (Trew, 2024).

Participants largely perceived the experience of absorbing interests in a positive light. The findings are therefore well positioned within the context of existing research asserting the benefits of absorbing interests (Davey, 2020; Harrop et al., 2019; Lizon, Taels & Vanheule, 2024; Lanou, Hough & Powell, 2012; Long, 2024; Mancil & Pearl, 2008; Wood, 2023). The children themselves described feelings of autonomy and self-assurance when engaging with their interests. Parents and teachers described how absorbing interests can bring out the best in the child, revealing their true potential, allowing them to develop expertise and engage comfortably with a range of activities. This builds on previous understandings whereby absorbing interests are thought to "provide the lens through which they view the world" (Winter-Messiers, 2007, p.142), to suggest that absorbing interests can unveil a whole new world for Autistic individuals. As well as acknowledging the supportive nature of absorbing interests in the child's present, participants foresaw their role in the child's future in motivating ambitions and directing career pathways. This is consistent with Autistic adults' accounts endorsing the benefits of guiding absorbing interests into constructive channels (Boven, 2018; Grandin, 2011; Grove et al., 2018; Long, 2024). Findings also captured the propensity for absorbing interests to facilitate social development and offer others a window into the child's world. Resultingly, parents and teachers provided examples of absorbing interests infusing children's experiences of positive relationships and interactions with others, and the children identified connections with family members and peers based on shared interests. This has wide-reaching implications for those working with Autistic children and aligns with research promoting absorbing interests as a way for practitioners to build rapport and support regulation in clinical and therapeutic settings (Couchman, 2025; Stallings, 2022; Virji et al., 2025).

Despite participants' endorsement of the myriad benefits of absorbing interests, and assertion of their importance in the children's lives, absorbing interests were depicted as a multi-faceted experience, which can present challenges at times. In particular, a commonality in the experiences of absorbing interests was the intensity with which they are often pursued. This was conveyed in children's and adults' descriptions of the all-consuming nature of absorbing interests, as participants illustrated how they can exert a disproportionate influence on the child's life and become all-encompassing across home and school contexts (Wood, 2023). These findings are consistent with the theory of monotropism, whereby areas of interest attract more processing resources, resulting in hyperfocus and difficulties switching attention to other areas of focus (Milton, Waldock & Keates, 2023). The children and adults described associated challenges, including the breakdowns in mutual understanding and communication that can occur when interests are not shared and the emotional overwhelm experienced by both the Autistic child and others when flow states are interrupted. Despite challenges associated with intensely focused attention, monotropism can also result in "flow states" conducive to positive wellbeing and regulation (McDonnell & Milton, 2014), as well as enabling individuals to develop expertise in areas of interest. The children generally associated their absorbing interests with feelings of happiness, pride and calm, as well as being valued as a regulatory tool by the children, teachers and parents alike (Boucher, 2022). Notably, teachers described navigating tensions between embracing the child's interest and fears of increasing perseverations and parents oscillated between apparent frustration and fond regard for the absorbing interests. The children themselves referenced others not sharing their enthusiasm for their interests with an air of sadness. Thus, a paradox lies in the duality of experience of these flow states. Whilst validating the tensions emanating from this duality of experience, instead of pathologising the absorbing nature of the interests, the current research posits that the paradox is underpinned by the Double Empathy Problem, thus extending the focus of this theory from the conventional view of its influence in the domain of social communication (Crompton et al., 2020; Milton, 2012; Rachanska, 2025). Herein, communication barriers are explained in the context of Autistic and non-Autistic individuals being "differently disposed social actors", with both lacking understanding of the other's communication style (Milton, 2012, p.884), rather than crediting the "deficit" to one individual (Cook, Hull & Mandy, 2024; Debrabander et al., 2021). The Double Empathy Problem may also be applied to the disconnection experienced between monotropic and polytropic thinkers. Absorbing interests are experienced and perceived differently by Autistic and non-Autistic individuals due to mismatches in salience, as well attention tunnels and

interest systems that are inherently divergent, with neither being superior to the other (Milton, 2012). Rather, differently disposed “tropisms” must both work to navigate challenges that ensue as a result of this difference.

3.8.2 RQ 2: What is the impact of using an Interest Map intervention which includes absorbing interests in learning experiences?

As well as exploring the experience of absorbing interests, this study considered the application of absorbing interests in learning experiences within a special class for Autistic children, using an Interest Map intervention. Findings indicate that the Interest Map was associated with improved engagement, self-direction and motivation in academic and social activities. In particular, teachers noted reduced need for prompting to stay on task, enhanced quantity and quality in children’s work, and increased confidence in their engagement with material. Importantly, teachers highlighted that absorbing interests do not provide a “magic wand solution” to resolve the challenges children experience in particular curricular areas or result in automatic acquisition of skills. This may provide further context to studies reporting variable outcomes following absorbing interest-based interventions (Marshall & Myers, 2021; Ninci et al., 2019). Rather, antecedent-based approaches using absorbing interests facilitate increased positive engagement, which over time, within a supportive environment can mediate development across domains (Kim et al., 2024). This aligns with the Theory of Change framework (Weiss, 1995) which proposes the role of short-term outcomes in realising transformative change. The Interest Map facilitates the proximal outcome of increased engagement, which provides the foundation for longer-term distal outcomes across developmental domains. Unlike some previous research suggesting a correlation between absorbing interests and heightened overwhelm (Klin et al., 2007; Spiker et al., 2012; Turner-Brown et al., 2011), the Interest Map had a positive impact in terms of promoting regulation and encouraging a positive mindset. Absorbing interest-based learning did not result in increased perseveration on the topic of interest or increased behaviours that challenge, despite initial reservations of teachers towards the Interest Map. Rather, teachers reported that the children were able to transition to other activities when required, with support.

The Interest Map used in the current research therefore provides an example of how an antecedent approach to interest-based learning can be operationalised and implemented within a classroom setting. This offers an alternative to consequence-based approaches such as absorbing interest-based token economies and reward systems which have been heavily

critiqued, with research citing their limited long-term impact, due to their diminishing effect on intrinsic motivation (Ryan & Deci, 2024), as well as highlighting the ethical implications of restricting flow states by providing contingent access to absorbing interests (Woods & Waltz, 2019). Rather than trying to control behaviours and promote compliance in Autistic children, approaches such as the Interest Map foster autonomy and choice in learning and result in higher competence and confidence, resulting in improved performance, persistence, and overall well-being (Ryan & Deci, 2023). There are also opportunities to use the Interest Map to foster belonging by including non-Autistic peers in absorbing interest-based learning approaches (Tansley, Parsons & Kovshoff, 2022). The impact of the Interest Map therefore aligns with the theoretical perspective underpinning the research, suggesting that absorbing interests foster autonomy, competence and relatedness and thus increase intrinsic motivation which can lead to sustained positive outcomes (Boucher, 2022; Deci & Ryan, 2012; Lung et al., 2024; Ryan & Deci, 2024).

3.8.3 RQ 3: What is the feasibility of implementing the Interest Map intervention in a special class for Autistic children in the Irish context?

The Interest Map was categorised as a feasible intervention for teachers to implement, providing a way to structure and align interest-based learning with curricula and planning requirements already in place. It is a low resource-intensive intervention that can be implemented by teachers, without the need for additional training or extensive assessment of the child's profile. Although teachers identified barriers including lack of time, competing demands and difficulties balancing the needs of all children in the class, the flexibility to adapt the Interest Map to different classroom contexts contributed to the feasibility of implementation. While this research was carried out within a primary special class setting, teachers cited the potential for the Interest Map to be used with individual children and as a whole class approach with a range of student profiles, thus suggesting its applicability to both mainstream and special classes across primary and post-primary settings. Relatedly, some teachers found it supportive to include peers in the intervention by facilitating reverse inclusion from mainstream into the Autism class. This echoes research proposing the positive outcomes associated with incorporating peer-mediation to support Autistic children (Dervan, Egan & Ring, 2024). Including peers in interventions may present opportunities to enhance mutual understanding and thus address the Double Empathy Problem (Milton, 2012; Milton, Waldock & Keates, 2023).

Teachers described facilitators of the intervention including designated time for planning, and continued use of other structures and accommodations tailored to the child's profile, for example using strategies to enhance predictability or respond to sensory preferences. The Interest Map reduces demands on teachers to implement "yet another intervention" in the context of an already loaded schedule, instead providing opportunities to build on existing structures and infuse interest-based learning into the children's typical curricular experiences and established classroom routines. This therefore situates the Interest Map within the Universal Design for Learning Framework and facilitates inclusion of all children (Barrera Ciurana & Moliner García, 2024; Ring & O' Sullivan, 2021; Zhang et al., 2022), thus aligning with recent educational policy and curricular frameworks endorsing the use of children's interests in teaching and learning (Coolahan et al., 2017; NCCA, 2019; NCCA, 2023a; NCCA 2023b). The current findings provide new foci for enhancing inclusion of Autistic children in education, suggesting that instead of trying to ameliorate difficulties, the way to reduce barriers to inclusion may be to focus on strengths and interests. This aligns with the Neurodiversity Paradigm and contributes to growing evidence around the importance of implementing strengths-based interventions with Autistic populations (Lee et al., 2024; Leadbitter et al., 2021; Trew, 2024), as findings illustrate the positive impact on the wellbeing of both the Autistic child and their family when interventions foster strengths rather than exclusively focusing on challenges.

3.9 Conclusion

The current research provides insights into how absorbing interests are experienced by Autistic children, their parents and teachers. It exemplifies how the Autistic voice can be meaningfully included in research using participatory approaches such that Autistic children's voices are not just heard, but result in tangible actions (Lundy, 2007). It explores the impact of an Interest Map intervention, co-created with the children and their teachers, to elucidate the facilitators and barriers that contribute to feasibility of implementation. Based on co-constructed understandings with the children, their parents and teachers, the findings have significant implications for practice, policy and future research. Moreover, they provide a strong rationale for the endorsement and nurturing of absorbing interests as a way to facilitate meaningful inclusion of Autistic children in education and in wider society. The strengths, limitations and implications of the current research are considered in the Critical Review (Chapter 4).

Chapter 4: Critical Review and Impact Statement

4.1 Chapter Overview

This chapter presents a critical review of the research process. It begins by considering the epistemological position and theoretical perspectives underpinning the research, as well as reflecting on the design and methods used. The strengths and limitations of the research are highlighted. Finally, an overview of implementation science, a personal reflection and an impact statement convey the implications of the findings for policy, practice and future research within the field of Educational and Child Psychology (ECP).

4.2 Reflections on the Epistemological Position

4.2.1 Constructivism

The current research is underpinned by a constructivist paradigm. Constructivism proposes that understandings are co-created through a dynamic process of accommodation and assimilation of knowledge (Bibi, Khan & Shabir, 2022), whereby one's frame of reference and understanding continually evolve over time in light of new experiences (Vygotsky, 1978). Knowledge is therefore subjective, context-dependent and created collaboratively (Cresswell & Poth, 2016). This epistemological position was chosen as it reflects the values and internal belief systems of the researcher, stemming from her experience as a primary school teacher, whereby children brought their life experiences and prior knowledge to the classroom and shared insights and perspectives to enhance new learning (Vygotsky, 1978). Furthermore, the researcher believes that constructivism is the most appropriate paradigm to underpin research whereby she as a neurotypical individual is exploring the experiences of neurodivergent individuals (Rao, 2020). Despite having extensive academic and professional experiences, the researcher believes that knowledge about Autism should be co-constructed with Autistic individuals and their families rather than externally imposed. As such, the researcher actively engaged with participants using person-centred, neuro-affirmative methodologies to co-construct emergent understandings on absorbing interests through "social and personal processes of meaning-making" (Pilarska, 2021, p.64).

Ontologically, constructivism proposes that reality is a culmination of one's experiences, perspectives and interpretations of the world, as shaped by social, historical and cultural contexts (Cresswell & Poth, 2016). This perspective posits that multiple, holistic realities can occur simultaneously (Gannon, Taheri & Azer, 2022) and aligns with the

exploratory multi-perspectival approach embodied in the case study. Moreover, it reflects the heterogeneity of Autistic experiences, as well as considering the propensity of complex, inter-related factors within the home, school and external environments to shape the child's lived experiences (Bronfenbrenner & Morris, 2006). The researcher positioned themselves within the research, with the role of understanding absorbing interests through the lens of participants. This involved embracing the subjective, relational and value-laden nature of the research, whilst ensuring the authentic voice of participants was preserved, in line with the axiological beliefs underpinning constructivism (Cresswell & Poth, 2016). In doing so, the voice of the child was amplified, listened to and linked to meaningful actions (Lundy, 2007).

Notwithstanding its congruence with the current research approach, there are limitations associated with constructivism. Constructivism generally focuses on achieving depth of meaning rather than consensus, which may challenge traditional assumptions around rigour and replicability in research (Cresswell, 2013). However, this is typical in case study research, whereby the aim is to achieve particularity and contextuality rather than generalisability (Stake, 1995). Secondly, the central tenet of subjectivity may result in researcher bias distorting both the interactions with participants during data collection, as well as analysis and interpretation of findings (Bibi, Khan & Shabir, 2022). Aiming to mitigate these limitations, the researcher maintained a reflexive stance (Cresswell, 2013) by documenting and reflecting on experiences and decisions throughout the research process, as well as interrogating personal values and internal belief systems and their influence on the research. As well as the importance of reflexivity in research of this nature, consideration of the impact of biases, attitudes and values on practice is recommended within the field of ECP, as stipulated in professional guidelines (PSI, 2022).

4.2.2 Alternative Research Paradigm

An alternative research paradigm considered was that of critical theory due to its suitability to case study research (Cresswell & Poth, 2016) and its applicability in studies with neurodivergent individuals (Goodley et al., 2019). Critical theory shares some foundational elements with constructivism, including the view that knowledge is a social construct, as well as the mutual objective of understanding lived experiences (Cresswell & Poth, 2016). However, critical theory perspectives move beyond understanding experiences to empowering individuals to transcend inequality, stigma and power imbalances (Milton, 2010) through activism and challenging systemic factors, policies and societal norms (Cresswell & Poth, 2016). In the context of Autism research, critical theory deconstructs

assumptions of pathologisation and normativity that misconstrue attributes as “deficits” and perpetuate exclusion (Hall, 2019). Critical theory therefore aligns with the aims of the neurodiversity movement, as well as those of the current research around promoting inclusive education and amplifying the Autistic voice. A critique of critical theory is its over-focus on macro-level influences, whilst failing to adequately consider the micro-level experiences of individuals (Goodley et al., 2019). It also has propensity to over-emphasise generic extrinsic factors contributing to societal oppression, thus neglecting to affirm the embodied components and heterogeneity of Autism (Goodley et al., 2019). Rather, the current study wished to illuminate a nuanced understanding of Autistic children’s experiences, complemented by perspectives within micro-level contexts of their home and school environment. In addition, it wished to promote transformative, meaningful change through co-creating knowledge and sharing power with children, parents and teachers, rather than becoming consumed by power imbalances and systemic factors. As such, a constructivist approach, informed by principles of the Neurodiversity Paradigm was deemed most appropriate for the current research.

4.3 Reflections on the Theoretical Perspective

4.3.1 Self-Determination Theory

Self-Determination Theory (SDT) informed the theoretical perspective for the study. SDT postulates that the basic psychological needs of autonomy, competence and relatedness must be fulfilled for people to experience ongoing growth and wellbeing (Ryan & Deci, 2024). A key tenet of SDT is the differentiation between autonomous and controlled motivation, often referred to as intrinsic and extrinsic motivation (Ryan & Deci, 2024), whereby intrinsic motivation is viewed as being conducive to optimal outcomes (Guay, 2022; Ryan & Deci, 2024). In the current research, SDT provides insights into the increased motivation often associated with absorbing interests in Autism, as they appear to evoke intrinsic motivation and satisfy children’s needs for autonomy, competence and relatedness. SDT has relevance within ECP practice, due to the psychologist’s role in fostering child autonomy, competence and relatedness through direct and systemic work to promote meaningful engagement in learning and enhance inclusion. A considerable strength of SDT is its application across diverse settings and populations, including in the field of education (Niemic & Ryan, 2009; Ryan & Deci, 2023), ECP (Guay, 2022) and with Autistic individuals (Friedman et al., 2024; Piedade et al., 2023; Webster, Bruck & Saggars, 2022), resulting in an extensive empirical base supporting the framework. However, SDT also has

limitations including its oversimplification of the complexity of motivation and lack of consideration for cultural factors and individual differences in motivational processes (Sheldon et al., 2003).

4.3.2 Alternative Theoretical Perspective

An alternative theoretical perspective considered by the researcher was that of Flow Theory (Csikszentmihalyi, 1975; McDonnell & Milton, 2014; Murray, 2005, 2018). Flow states are described as heightened moments of focus and optimal motivation (Heasman et al., 2024; McDonnell & Milton, 2014; Milton, 2021) facilitated by explicit goals, achievable outcomes and absorption of attentional resources due to monotropic cognition (Murray, 2018). Within this theory, flow is conceptualised as being multi-faceted and dynamic (Heasman et al., 2024), accepting that flow is not always optimal and may pose challenges for the individual if they are required to disengage due to environmental factors or social demands (Milton, 2021). The notion of flow states provides context to many characteristics common in Autism, including intense focus on areas of interest, difficulties switching between tasks, sensory processing differences and stimming, hereby offering an alternative to traditionally pathologising theories of Autism (Heasman et al., 2024). This theoretical perspective has been substantiated by Autistic accounts (Heasman et al., 2024; Rapaport et al., 2024) and aligns with the Neurodiversity Paradigm which also underpins the current research approach. In addition, flow theory has important applications within educational settings, as research posits that many factors contributing to the exclusion of Autistic learners impact flow states, including rigid curricula, adult-imposed learning objectives, neurotypical social demands and environments that do not meet sensory needs (Heasman et al., 2024).

Although the researcher values insights provided by Flow Theory into the experience of absorbing interests, SDT was deemed more appropriate for contributing understandings on the impact and feasibility of an absorbing interest-based learning approach. SDT was chosen due to its strong applicability to educational contexts and propensity to provide clear guidance on the psychological factors that impact Autistic children's learning experiences.

4.4 Reflections on the Research Design

4.4.1 Qualitative Case Study Design

Qualitative case study designs are typically exploratory, seeking to understand the “why” and “how” underpinning a social construct or lived experience (Bibi, Khan & Shabir, 2022; Crowe et al., 2011). The current research aimed to explore lived experiences, form

nuanced, contextualised understandings and include the under-represented voices of Autistic children (Cresswell & Poth, 2016). The research design was informed by Stake's (1995, 2013) case study methodology due to its epistemological concordance with the constructivist orientation underpinning the research (Yazan, 2015) and its alignment with the research questions (Cresswell, 2013). Stake (1995) assumes that knowledge is constructed rather than discovered and acknowledges the inextricable links between the researcher, participants and reader in conveying multiple perspectives on their lived experiences in a naturalistic environment, as well as in interpreting knowledge (Bibi, Khan & Shabir, 2022; Cresswell, 2013; Yazan, 2015). As such, the goal is not to confirm hypotheses or impose pre-defined categories on the data, but rather to explore emergent meanings, subjective experiences and create a holistic understanding of the phenomenon (Stake, 1995). Within qualitative case study designs a wide variety of methodologies can be adapted to suit various populations. This contrasts with quantitative designs which may impose inappropriate measures on neurodivergent individuals.

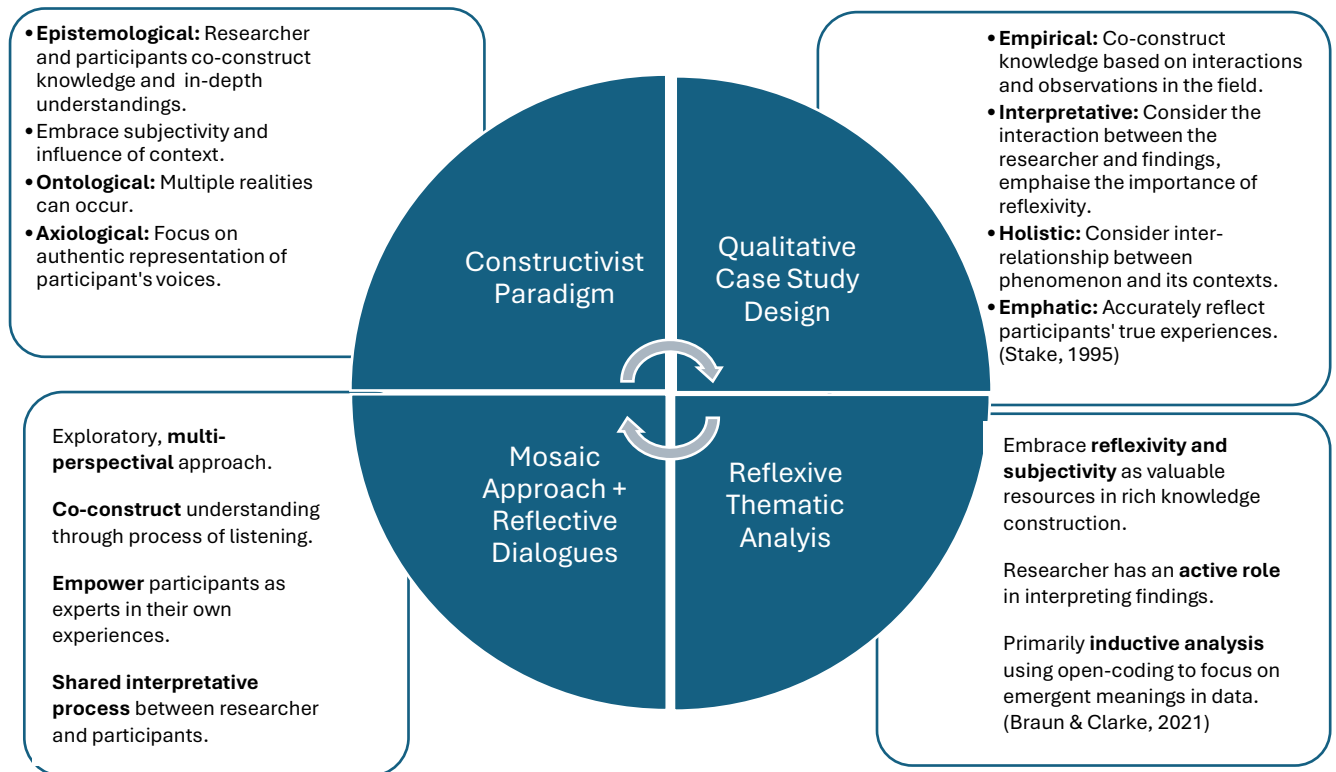
Another strength of case study design is its propensity to “unveil complex human interactions, experiences and everyday life activities” which readers can relate and apply to their own contexts (Kekeya, 2021, p.34). Although case study findings are typically not generalisable, they provide nuanced insights into real-life experiences from the perspectives of those immersed in the phenomenon or context. A detailed description of each case is provided, including information on participants, the research setting and the case study protocol (Creswell & Poth, 2016) (Appendix S). This enables the reader to determine elements that are applicable to their own context and thus informs practice and policy (Kekeya, 2021).

Limitations of qualitative case studies include the extensive time required to collect data, build rapport with participants and conduct data analysis (Creswell & Poth, 2016), as well as concerns regarding rigour due to inconsistent application of case study methodologies (Hyett, Kenny & Dickson-Swift, 2014; Yazan, 2015). Aiming to mitigate these issues and enhance credibility and rigour, a detailed description of the paradigm, theoretical perspectives and methods underpinning the research is provided (Creswell & Poth, 2016; Hyett, Kenny & Dickson-Swift, 2014). The researcher ensured that the methodologies and data analysis methods used were cohesive and harmonious with the research paradigm and design (Hyett, Kenny & Dickson-Swift, 2014; Kekeya, 2021) (Figure 4.1). In addition, criteria proposed by

Stake (1995) were used as a framework to appraise the quality of the current case study (Appendix F), thus increasing the impact of the findings.

Figure 4.1

Cohesiveness of research paradigm, design and methodologies



4.4.2 Alternative Research Design

An alternative design considered was a mixed methods case study, whereby quantitative and qualitative approaches are integrated to provide in-depth evidence (Cook & Kamalodeen, 2020). Mixed methods approaches typically yield richer, more comprehensive understandings than purely qualitative or quantitative approaches (Cook & Kamalodeen, 2020). Although there is growing evidence of the compatibility of case study and mixed methods approaches, there remains some tensions in navigating how these are combined (Cook & Kamalodeen, 2020). A mixed method design was deemed to be less congruent with the epistemological position of the study than a qualitative case study design (Cresswell & Poth, 2016). Furthermore, the significant time required for implementing a mixed methods approach, whilst also maintaining other components of the research aims may have exceeded the scope of the present study.

4.5 Reflections on Sample and Data Collection Methods

4.5.1 Sample

The current research used purposive sampling, as is typical in qualitative case study research whereby the researcher aims to recruit participants according to particular characteristics who best address the research questions (Creswell & Poth, 2016). The decision to connect the triad of child, parent and teacher perspectives to co-construct understanding on absorbing interests aligns with The Bioecological Model of Human Development (Bronfenbrenner & Morris, 2006). Herein, the child is situated at the centre of a complex ecosystem, as consideration is given to the inter-related home and school systems around the child, as well as the influence of external contexts such as legislation and current societal understandings of Autism on the experience and impact of absorbing interests.

The sample size was selected in accordance with recommendations for case studies within the literature (Creswell & Poth, 2016). Small sample sizes are a core feature of case study research as the aim is to elucidate particularities rather than make generalisations to wider populations (Bibi, Khan & Shabir, 2022; Creswell & Poth, 2016; Cronin, 2024; Stake, 1995). There was variance within the chosen sample, on the basis of age, gender, individual school-based factors and profiles of strengths and needs, as well as shared characteristics in terms of Autistic identity, enrolment in a special class for Autistic children and geographical location. The special class setting was chosen as it provided access to participants who met the inclusion criteria, and enabled the researcher to explore the phenomenon of absorbing interests within the children's natural context (Stake, 1995). Given the continuum of educational provision in Ireland (Banks & McCoy, 2017), future research may benefit from including alternative settings, including mainstream and special schools, to explore whether absorbing interests are experienced differently by these cohorts. A limitation of the current research is its failure to include more detailed information about the teacher and parent participants beyond demographic information. For example, although information was gathered on teacher experience of Autism, insights into engagement in teacher professional learning may be insightful.

Incorporating a familiarity period ahead of data collection to establish rapport was an important part of the research to ensure the child felt safe within the space and empowered to share their views (Lundy, 2007), as well as to mitigate power imbalances, thus contributing to the generation of more authentic findings (Creswell & Poth, 2016). This was further

supported by measures to address ethical considerations, such as ensuring informed consent and assent by using adult and child-friendly versions of consent forms and information sheets, (Appendix Q), as well as providing a visual cue card during the Mosaic Approach and interviews to facilitate non-verbal communication of participants' right to withdraw or take a break (Appendix O). Notably, participants appeared content to provide assent and participate throughout the child sessions.

4.5.2 Data Collection

Multiple methods were used to gather data and build a rich picture of the cases, including the Mosaic Approach, semi-structured interviews and reflective dialogues, all of which were triangulated to generate findings (Cresswell & Poth, 2016; Kekeya, 2021). All methods were piloted in advance of data collection to assess their suitability and support refinement of measures (Sampson, 2004, as cited in Cresswell, 2013). The researcher spent adequate time in the field and capitalised on naturally occurring sources of information (Stake, 1995), such as gaining data about the children's learning profiles through observation using an observational protocol (Appendix T) and reviewing SSPs (Creswell & Poth, 2016; Stake, 1998). Measures were taken to minimise disruption of the classroom ecosystem during the observation period, including conducting a pre-observation meeting with the teachers, using discreet recording tools and ensuring typical classroom routines were maintained.

The Mosaic Approach (Clark, 2017) was subsequently used to gain children's insights into their experiences of absorbing interests, thus addressing a gap identified in the literature (Brown et al., 2024b; DCEDIY, 2024; Grove et al., 2018; Lynam et al., 2024; Trew, 2024), as well as informing the co-creation of the Interest Maps. A variety of neuro-affirmative, child-friendly tools were used including Photo Voice, a communication mat and play-based methods using playdough and Lego. As well as attending to information shared verbally by the children through these methods, attunement to their non-verbal communication and modes of expression provided valuable insights into their views and ideas (Lebenhagen, 2020; Ring, Harte & Harmon, 2021). In addition, the "Ideal Playtime Drawing Task" was adapted by the researcher for the current research based on the "Ideal Self Drawing Task" (Moran, 2001, 2020) and "Ideal School Drawing Task" (Williams & Hanke, 2007) and validated by expert review and piloting of the measure. This constitutes a unique contribution of the research by providing a tool to elicit Autistic children's views on their interests and preferred activities. Individual semi-structured interviews enabled the research to hone in on topics of relevance to the research question and existing literature, whilst also providing

flexibility for participants to guide interviews based on their lived experiences. Expert review of the interview schedules by the research supervisors and progression panel members, as well as conducting pilot interviews, allowed the researcher to consider the phrasing of questions to remove language that may have been perceived as misleading, persuasive or irrelevant to the research questions. An identified limitation is the fact that interviews are typically based on the researcher's agenda and participants' responses are interpreted by the researcher, thus resulting in a power imbalance, as well as creating possibilities of social desirability bias (Cresswell & Poth, 2016). As such, the researcher chose to also facilitate reflective dialogues with the teachers, guided by the ALACT Framework (Korthagen et al., 2001), to encourage a more collaborative approach in the co-construction of knowledge and empower teachers as experts in their field (Digby, 2017; Gorman & Hall, 2023; Moyles, Adams & Musgrove, 2002). Similarly, as part of the Mosaic Approach the children were invited to piece together information and the researcher made notes based on children's iterations to support reflection, interpretation (Clark, 2005) and co-creation of the Interest Maps, as well as informing teacher practice. This enhanced the reciprocity of the research as the children's participation resulted in meaningful actions. This is critical to avoid tokenistic inclusion of Autistic children's voice (Lundy et al., 2018), such that we don't just hear the child's voice but use their ideas to influence plans and inform decisions (Cunningham, 2020; Hardy & Hobbs, 2017; Lundy, 2007; Ring, Harte & Harmon, 2021; Turner, Ring & O' Sullivan, 2020). Inclusion of Autistic voice has propensity to be a catalyst for change, resulting in supportive practices that are attuned and responsive to children's needs (Cassidy, 2023; Cochrane, 2016; Kennan, Brady & Forkan, 2019; Turner, Ring & O' Sullivan, 2020). Issues of power could have been further mitigated by extending the use of reflective dialogues to parents and by providing participants with opportunities for member checking to confirm the findings (Stake, 1995).

An alternative approach considered to semi-structured interviews was that of focus groups. A strength of focus groups is that they provide insights into different experiences and facilitate discussion between participants on varying perspectives (Jones et al., 2022). In addition, focus groups may be more time efficient than conducting individual interviews. However, it was considered that there would be greater risk of social desirability bias within this group approach due to reduced anonymity, which may result in participants being reluctant to share information or openly reflect on their experiences (Jones et al., 2022).

4.6 Reflections on and Rationale for the Data Analysis Methods

4.6.1 Reflexive Thematic Analysis

Qualitative data from the interviews and reflective dialogues were analysed using Reflexive Thematic Analysis (RTA) which facilitates identification of themes within the data (Braun & Clarke, 2019). Findings were supplemented by artefacts from the Mosaic Approach. A strength of RTA is its alignment with the constructivist paradigm, as both embrace reflexivity, creativity and subjectivity as valuable resources in knowledge construction (Byrne, 2022; Braun & Clarke, 2019). An experiential orientation to RTA was used, focused on exploring the meanings participants attribute to experiences (Byrne, 2022). A primarily inductive approach to data analysis was taken, as findings emerged from the data through a process of open-coding, however some deductive processes were used to check themes against the data and research questions. A focus on inductive analysis was important to ensure that participants' voices were authentically represented rather than imposing pre-defined criteria (Byrne, 2022).

Stake (1995) defines data analysis as “a matter of giving meaning to first impressions as well as to final compilations” (p. 71). This perspective values researcher intuition throughout the research process, positing that interpretation of issues and contexts relating to the cases may commence at any point, including during data collection (Yazan, 2015). As such, data analysis involved an iterative and recursive process, involving multiple layers to generate rich meanings (Byrne, 2022; Stake, 1995). Although the current research paradigm and methodologies highlight the value that subjectivity brings in developing knowledge and representing multiple perspectives rather than one absolute truth (Yazan, 2015), it is necessary to consider trustworthiness to minimise misrepresentation (Creswell & Poth, 2016; Stake, 1995). Aiming to increase credibility, the researcher prioritised triangulation of data sources, data collection methods and theory triangulation (Stake, 1995). Within, RTA, researcher subjectivity is viewed as a “resource for knowledge production, which inevitably sculpts the knowledge produced rather than a must-be-contained threat to credibility” (Braun & Clarke, 2021, p. 334). Based on this premise, the researcher did not include multiple coders to achieve consensus or calculate coding reliability (Byrne, 2022). Rather, the researcher embraced their active role in interpreting patterns within the data (Byrne, 2022), whilst maintaining a reflexive stance and engaging in collaborative reflection with research supervisors on the coding processes and findings to form rich, coherent understandings and enhance dependability (Byrne, 2022; Stake, 1995, 2013). Reflexivity throughout the research

process contributed to the confirmability, as the researcher endeavoured to reduce the impact of bias on the findings (Byrne, 2022; Stake, 1995). Explicit illustrations of the interpretative process in constructing meaning through multiple layers of abstraction are provided (Appendix R). Clear documentation of decisions throughout the research and creating an audit trail of the coding process using NVivo-14 (Lumivero, 2023) contributed to the consistency and transferability of the findings and increased transparency (Yazan, 2015). An evaluation tool adapted from Braun and Clarke (2021) was used to assess the quality of implementation of RTA (Appendix F), thus enhancing the rigour of the study.

4.6.2 Alternative Data Analysis Approach

The researcher considered Interpretative Phenomenological Analysis (IPA) as an alternative data analysis approach. IPA involves detailed exploration of lived experience to elucidate how individuals make sense of a phenomenon and why it matters (Cooper et al., 2022; Eatough & Smith, 2017). IPA also emphasises that individuals' experiences are contextually bounded and values subjectivity (Cooper et al., 2022; Eatough & Smith, 2017). IPA therefore aligns with the current research paradigm and design and has been applied extensively within the field of psychology (Eatough & Smith, 2017). IPA may be an effective qualitative approach in Autism research, due to its emphasis on double hermeneutics, whereby both the researcher and participant engage in a simultaneous interpretative process to understand their experiences (Howard, Katsos & Gibson, 2019; MacLeod, 2019). This values the Autistic voice as an expert in their own experiences and perhaps reduces the Double Empathy Problem (Milton, 2012) due to the focus on mutual understanding (Howard, Katsos & Gibson, 2019). Conversely, the suitability of IPA in Autism research has been questioned due to its heavy reliance on language and communicative competency to illuminate the nuances of participants' experiences (Howard, Katsos & Gibson, 2019). Much research involving IPA has been with Autistic adults (Cooper et al., 2022; Taels et al., 2023; Underhill et al., 2024) and thus RTA was selected as a more appropriate method for data analysis in the current research involving Autistic children.

4.7 Implementation Science

Implementation science is concerned with bridging the gap between research and practice by applying evidence-based practices and interventions in real-life settings (Kelly & Perkins, 2012). This involves considering implementation fidelity, as well as identifying barriers and facilitators to maximise proximal and distal outcomes and enhance transferability (Moir,

2018). In addition, implementation science acknowledges the impact of contextual, socio-cultural and external factors on intervention outcomes (Moir, 2018; Rojas-Andrade & Bahamondes, 2019) and aligns with Bioecological Systems Theory (Bronfenbrenner & Morris, 2006), thus facilitating systemic and organisational change.

Significant emphasis has been placed on connecting educational research, policy and practice using a “Whole Education Approach to Inclusion” (Kenny, McCoy & O’Higgins Norman, 2023) to foster positive, evidence-based learning experiences (Kelly & Perkins, 2012; NCSE, 2024; Parker, Thomsen & Berry). However, research shows that selecting approaches that are both empirically supported and conducive to feasible implementation continues to pose challenges for educators, particularly given the myriad interventions that are highly marketed without an established evidence base, as well as those that are evidence-based but do not have real-life applicability (Moir, 2018). Consideration of empirical basis and implementation science is particularly important for ECPs due to their role in directly facilitating interventions in casework, as well as systemic work with schools to advise on interventions that meet children’s identified needs and are appropriate to the school context, ensuring staff readiness and assessing implementation (Moir, 2018).

In the current study, the researcher ensured that the Interest Map approach was evidence-based by carrying out a comprehensive systematic literature review, considering inclusive educational policy, pedagogies and curricular frameworks and integrating theoretical perspectives to inform its design. Implementation science was considered when exploring teachers’ perspectives of the feasibility and impact of the approach, as well as considering the fidelity of intervention implementation (Table 3.2).

4.8 Implications of the Research

The current research has potentially wide-reaching implications across national and school-level dimensions of inclusive educational policy and practice implementation (O’Sullivan & Ring, 2024), as well as having implications for ECPs in their work in understanding and supporting Autistic children and young people. The findings illuminated in this study assert that curricular developments, inclusion policy and practice should be integrated to reflect the propensity of absorbing interest-based learning to support meaningful inclusion of Autistic children in education. Accentuating the benefits accruing from interest-based learning across policy and curricula, as well as including associated practical strategies in national programmes that can be implemented at school-level presents a pragmatic way to mitigate barriers to curriculum access and transform Autistic learners’ educational experiences (DoE, 2024; O’Sullivan & Ring, 2024; Ring et al., 2018; Ring, 2024).

Given that incorporating absorbing interests in education is not a completely new phenomenon, this research clarifies parameters to support teachers in implementing and evaluating absorbing interest-based approaches to increase Autistic children’s skills across social, regulation and engagement domains in a neuro-affirmative way (Lung et al., 2024). Findings propose that using an Interest Map to embed absorbing interests in learning experiences as part of children’s typical curricular experience is conducive to positive outcomes and mitigates ethical considerations posed by consequence-based approaches. The research also identifies facilitators and barriers to effective implementation of the Interest Map, as well as providing recommendations on navigating challenges posed by the all-consuming nature of absorbing interests and the Double Empathy Problem (Milton, 2012). This offers guidance to parents and teachers as interventionalists, thus enhancing the applicability of the Interest Map to real-life contexts. Recommendations are provided for utilising interest-based learning in a cross-curricular manner as a targeted, indicative and universal approach, to align with the Continuum of Support Model in place in Irish schools (GoI, 2007) (Figure 4.2).

Addressing the gap identified in previous research (Brown et al., 2024b; DCEDIY, 2024; Grove et al., 2018; Lynam et al., 2024; Trew, 2024), findings of this study highlight the importance of including perspectives and narratives of Autistic children in research to develop understandings of their lived experiences and ensure practices designed to support Autistic children are reflective of their priorities and preferences. Including the Autistic voice marks a shift from traditional approaches that make assumptions based on neurotypical norms

and may influence the way the Autistic experience is conceptualised. This is highly significant to ECPs in their roles as practitioners, advocates and researchers whereby listening to children and fostering active partnerships with teachers and parents are fundamental on a moral, legal and pragmatic basis (Hardy & Hobbs, 2017; PSI, 2022). This study provides insights into how the voices of Autistic children can be meaningfully included in research and in the planning and implementation of learning experiences and supports (Ring, Harte & Harmon, 2021), using divergent methodologies, such as the Mosaic Approach to increase accessibility and reduce barriers to communication and engagement. Future research may build on the success of this study to include the voice of Autistic children in alternative educational settings, such as preschool and post-primary, as well as mainstream and special schools to extend understandings on experiences of absorbing interests.

Figure 4.2

Interest-Based Learning and the Continuum of Support

| | |
|----------------------------------|---|
| Support for Few (Targeted) | <ul style="list-style-type: none"> • Embed children’s interests in individualised behaviour supports e.g. Power Cards, Social Stories, Emotional Regulation Tools, Visual Schedules. • Allow children to seek access to their interests when required as a regulation strategy. • Co-create individualised Interest Maps with the children, linking their interests to Student Support Plan targets. • Establish lunch-time social groups based on identified children’s shared interests. • Consider children’s interests in person-centred planning to inform decision-making e.g. transitioning between educational settings. |
| Support for Some (Indicative) | <ul style="list-style-type: none"> • Include references, examples and illustrations relating to the children’s interest in writing prompts, worksheets, learning tasks and materials. • Design thematic teaching units based on children’s interests to expand learning opportunities. • Create opportunities for peer and group activities that align with children’s interests. • Plan educational field trips that align with children’s interests. |
| Support for All (Universal) | <ul style="list-style-type: none"> • Provide books and reading materials relating to children’s interests to extend learning. • Provide opportunities for children to complete projects and presentations on their areas of interest. • Observe and talk to children to find out about their interests. Communicate and collaborate with parents. • Value student voice and provide regular opportunities for them to share information about their interests. • Complete “All About Me” or “Show and Tell” activities at the start of the school year to learn about the children’s interests. • Demonstrate curiosity and acknowledge children’s interests with a comment or a question. • Incorporate choice in learning tasks to enhance student autonomy. |

4.9 Strengths and Limitations

A strength of the research is its adoption of a qualitative case study approach, underpinned by a constructivist paradigm to co-construct rich, nuanced understandings on the experience and impact of absorbing interests and empower participants to convey emergent meanings relating to their lived experiences (Bibi, Khan & Shabir, 2022; Creswell & Poth, 2016). This addresses a significant gap in the evidence base identified in the systematic review, whereby much research around this topic to date has comprised of quantitative designs. The research was further strengthened by the cohesiveness of the paradigm, design and methodologies used (Figure 4.1), all of which embrace inductivity, subjectivity and reflexivity, as well as situating the researcher as an active agent in the interpretative process (Creswell & Poth, 2016) to understand absorbing interests through the lens of participants. Measures taken to ensure trustworthiness (Table 4.1) and evaluation of adherence to the assumptions of the research design, paradigm and methodologies using validity frameworks (Braun & Clarke, 2021; Stake, 1995) strengthens the findings.

Table 4.1

Measures Taken to Establish Trustworthiness (Lincoln & Guba, 1985)

| Criterion | Measure |
|-----------------|---|
| Credibility | <ul style="list-style-type: none"> • Triangulation of data sources, collection methods and theories • Familiarisation period and sufficient time spent in the field to build rapport • Peer debriefing with colleagues and research panels |
| Transferability | <ul style="list-style-type: none"> • Purposeful sampling • Thick description of research setting and participants • Data collection and analysis process described with replicable precision |
| Dependability | <ul style="list-style-type: none"> • Triangulation of methodologies • Systematic coding using NVivo-14 • Audit trail of coding process • Documentation of research decisions |
| Confirmability | <ul style="list-style-type: none"> • Researcher reflexivity throughout the research process • Verbatim quotes included in findings |

Another strength of this research is its use of neuro-affirmative methodologies in the Mosaic Approach and consideration of the Lundy Model (2007) to ensure that the child's voice was heard, listened to and resulted in transformative action. This is particularly significant given the dearth of Autistic children's voices within existing research around this topic (Brown et al., 2024b; DCEDIY, 2024; Grove et al., 2018; Lynam et al., 2024; Trew, 2024). A further strength of the research is its exploration of the impact and feasibility of the Interest Map. Reflective dialogues and interviews with teachers who implemented the intervention provided authentic insights into the applicability of this approach in real-life classroom contexts (Moyle, Adams & Musgrove, 2002). This is furthered by evaluating the intervention using an implementation science framework (Table 3.2), thus bridging the gap between research and practice (Kelly & Perkin, 2012; Moir, 2018; Thorius et al., 2024).

Notwithstanding these strengths, there are limitations within the current study. In particular, the children's voices were not sought on the review of the Interest Map approach. Although video-recorded data enabled the researcher to view children's experience of the intervention and make interpretations through engaging in reflective dialogues with their teachers, it would have been preferable to seek children's perspectives on the intervention directly if the scope of the research had allowed. In addition, the sample in the current study included primary school Autistic children, all of whom used verbal modes of communication. Future studies could expand the applicability of the methods trialled in this study to Autistic individuals with alternative communication preferences. Future research may also consider gathering more in-depth demographic information. For example, gathering data on family background, supports at home and parental attitudes and understanding of Autism, as well as increasing the gender balance of participants, may have facilitated greater within case-analysis. Further exploration of factors such as teacher professional learning history and school ethos may have extrapolated moderators of best practice and enhanced the transferability of the findings. Moreover, during the reflective dialogues, there may have been opportunities to focus on elements of effective teacher practice more deeply (Moyle, Adams & Musgrove, 2002) to further elucidate facilitators and barriers of the Interest Map.

Another limitation of the study is the potential influence of social desirability bias during the semi-structured interviews and reflective dialogues. To reduce this risk, the researcher

ensured participants were fully informed on the research process, developed rapport and sought to empower them as experts in their own lives (Bergen & Labonté, 2020). Similarly, there was potential for memory bias to occur when teachers were reflecting retrospectively on their experiences of the Interest Map. This was mitigated by drawing on samples from video-recorded sessions to stimulate reflective dialogues (Cherrington & Loveridge, 2014; Moyles, Adams & Musgrove, 2002). Finally, there was propensity for researcher bias to impact the interpretation of the findings. This was addressed by prioritising reflexivity throughout the research process (Byrne, 2022; Creswell & Poth, 2016) and transparently documenting the coding process using NVivo-14 (Lumivero, 2023).

4.10 Personal Reflection

I used Rolfe, Freshwater and Jasper (2001) model to reflect on my experience of this research process. In doing so, I contemplated my motivations for engaging in the research, pondered the significance of the research in my personal development and considered how the research experience will influence my future career as an ECP.

4.10.1 What

I first began researching this topic while completing a Graduate Diploma in Autism Studies in 2021. Coming from a primary school teacher background, I had a desire to learn about practical ways to understand and support Autistic children in the classroom using strengths-based approaches. I remember reading an article entitled “Me and Monotropism: A unified theory of Autism” (Murray, 2018). I was captivated by this explanation of Autistic cognition and it resonated with me based on my experiences of working with Autistic children, providing a completely different lens to understand Autism. Herein my interest in monotropism and absorbing interests began and continued to grow as I progressed onto the Professional Doctorate in ECP and as such, I decided to explore this topic for my doctoral research, focusing on how absorbing interests can be applied within educational settings. Simultaneous to my completion of a systematic review on this topic, I undertook placements that involved supporting Autistic children and young people across a range of services. In particular, my time working on an Autism assessment team that prioritised neuro-affirmative assessment approaches influenced the trajectory of my research, as I began to question conceptualisations of Autism often portrayed by the medical model and I developed a passion for approaches that seek to affirm Autistic identity.

These experiences changed my attitudes and beliefs in relation to Autism and prompted me to address the research question relating to understanding the experiences of absorbing interests from the perspective of Autistic children, their parents and teachers within my empirical study.

I decided to frame the study within the Neurodiversity Paradigm and incorporate constructivist, qualitative and neuro-affirmative approaches that amplify the Autistic voice and those of their supportive adults. I wished to utilise language that affirmed Autistic differences and preferences and when I came across the term “absorbing interests” (Winter, 2012), I felt this appropriately captured the intensely captivating nature of monotropic flow states in a non-perjorative, non-pathologising way.

4.10.2 So What

This research process provided me with extensive opportunities to develop my knowledge and skills as a researcher, as I gained experience in designing and implementing a qualitative case study approach, using Reflexive Thematic Analysis, NVivo-14 software, the Mosaic Approach and reflective dialogues, all of which were novel experiences for me. I was required to engage in training and independent research to develop my competencies in using these approaches, as well as carrying out a pilot study. The research skills that I have gained will be of significance during my future career as an ECP, whereby I will need to demonstrate knowledge of research paradigms, methods and designs (PSI, 2022).

In addition, I gained experience in designing and evaluating the Interest Map and facilitating teachers to implement this as an intervention. Initially, I intended to incorporate mixed methods approaches in the research, including a quantitative element which involved comparing levels of children’s engagement in learning pre and post-intervention as a measure of its effectiveness. However, throughout the research process, I began to question what constitutes “effectiveness” and instead decided to explore the impact of the Interest Map, thus focusing on outcomes that are most important to the long-term well-being, autonomy and preferences of the children, parents and teachers involved in the research (Leadbitter et al., 2021). I also developed my understanding of the importance of implementation science in bridging the gap between research and practice and ensuring interventions are empirically-based and applicable to real-life settings.

Finally, I believe that engaging in this research process shaped my attitudes and practice as a trainee ECP, particularly in relation to including the voice of the Autistic child and ensuring that interventions and approaches designed to support Autistic individuals are underpinned by person-centred planning (Sanderson, 2000) and neuro-affirmative principles. I have learned practical ways to realise these ideals through involving children in planning their learning experiences using the Mosaic Approach, using neuro-affirmative play-based methods to elicit child voice, adapting the “Ideal Playtime Drawing Task” to explore their interests and preferred activities, incorporating elements of the Lundy Model (2007) in child-sessions, and using reflective dialogues with supportive adults to develop rich understandings.

4.10.3 Now What

I look forward to disseminating this research to enhance ECP and educator knowledge in this area and influence policy and practice in relation to inclusive education of Autistic children. In addition, I intend to carry the skills, knowledge, values and attitudes developed throughout this research process into my future career as an ECP to influence my direct casework with children and young people, consultations with their supportive adults, systemic work with schools and organisations, and contributions to national policy (PSI, 2022).

I reflect how the role of the ECP is often impacted by external factors, including policy agendas, societal understandings of difference and inclusion, and resource constraints, many of which result in the Autistic child’s voice being lost within a vacuum of systemic barriers. In addition, I consider how our understandings of Autism and approaches that we use to support Autistic individuals are often deficit-focused. Having conducted this research, I realise the importance of adopting a critical stance, given that ECPs operate in a system where children’s differences are both celebrated and problematised (Hardy & Hobbs, 2017). Furthermore, I have a renewed commitment to enabling Autistic voices to shape our understanding of Autistic experiences, as well as a determination to foster inclusion of Autistic children in education throughout my career by valuing their strengths instead of exclusively focusing on challenges.

4.11 Impact Statement

The current research aimed to explore how Autistic children, their teachers and parents experience absorbing interests, as well as delineating the impact and feasibility of an Interest Map approach that weaves absorbing interests into learning experiences. As the first known

study of its kind, it elucidates lived experiences of absorbing interests and explores the application of absorbing interest-based learning in naturalistic contexts, thus bridging the gap between research and practice in the education of Autistic children (Ulu-Aydin et al., 2024) and enhancing the applicability of the findings to real-life educational settings. It is envisioned that illuminating Autistic perspectives and empowering parents and teachers to share their insights will impact how absorbing interests are understood and harnessed to foster inclusion in education. As such, this research hopes to benefit Educational and Child Psychologists (ECPs), the Autism community and educational stakeholders alike.

In addition, the study uses SDT (Deci & Ryan, 2012) and the Theory of Monotropism (McDonnell & Milton, 2014; Murray, 2018) as lenses to understand the enhanced engagement and motivation often associated with absorbing interests, as well as emphasising the impact of the Double Empathy Problem (Crompton et al., 2020; Milton, 2012) on developing shared understandings of absorbing interests. This has potential influence on the way absorbing interests are understood as “restricted and repetitive interests” within a core diagnostic criterion of Autism (APA, 2022) and offers an alternative to the pathologising conceptualisation of absorbing interests often portrayed in clinical settings. As such, the findings are highly relevant to ECPs due to their roles in identifying Autism, understanding the Autistic experience and facilitating implementation of evidence-informed intervention strategies to develop academic, social and life skills and promote psychological well-being (PSI, 2022).

Dissemination of the findings will be of benefit to the professional practice and policy landscape of ECPs and teachers nationally and internationally. The researcher has already engaged in dissemination at the PSI Annual Conference, the National Educational Psychological Service (NEPS) Annual Conference, Mary Immaculate College (MIC) Research Week and by delivering guest lectures to undergraduate teachers in MIC. The researcher has plans to further disseminate the research findings at future conferences, including the Autism Europe International Congress (2025) as well as submitting papers for publication in peer-reviewed journals to extend the impact of the research.

4.12 Conclusion

This research contributes valuable findings to the relatively under-researched area of absorbing interests, as well as responding to the dearth of Autistic children’s voice in research

more generally. The findings illuminate that absorbing interests are a core part of Autistic identity and have propensity to provide a social bridge and create new opportunities for Autistic individuals, as well as acting as a source of regulation and support. The research delineates how absorbing interests can be embedded in learning experiences to enhance meaningful engagement and promote belonging. This has a significant impact on educational policy and practice both nationally and internationally, particularly as education systems strive towards the progressive realisation of inclusive education for Autistic children (DoE, 2024a; NCSE, 2024).

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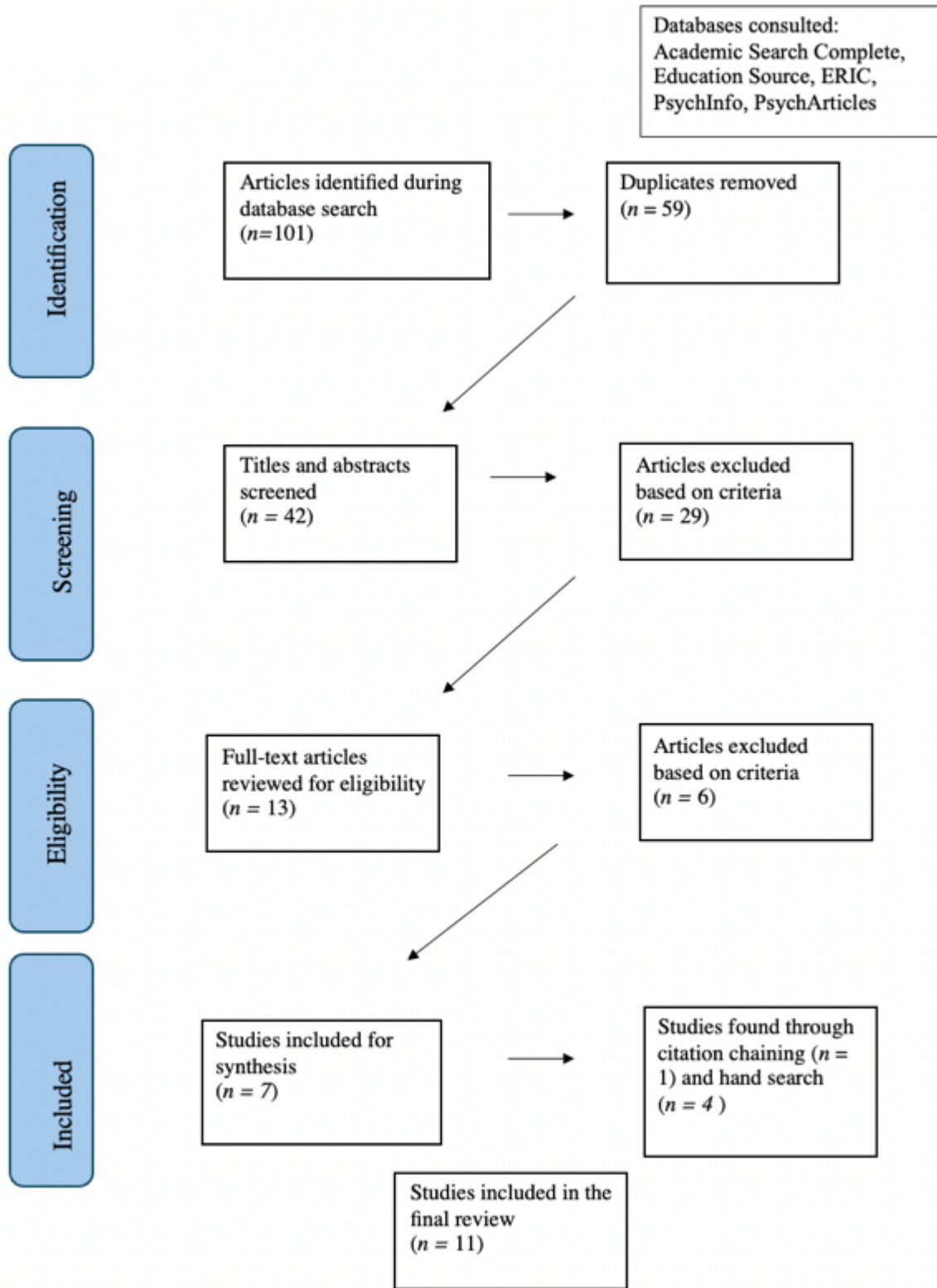
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Appendix A - PRISMA Flowchart (Page et al., 2021)



Appendix B – List of Excluded Studies

| Excluded | Rationale |
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| 1. State, T. M., & Kern, L. (2012). A comparison of video feedback and in vivo self-monitoring on the social interactions of an adolescent with Asperger syndrome. <i>Journal of Behavioral Education, 21</i> , 18-33. | This study does not relate to absorbing interests. |
| 2. Strang, J. F., Anthony, L. G., Yerys, B. E., Hardy, K. K., Wallace, G. L., Armour, A. C., ... & Kenworthy, L. (2017). The flexibility scale: development and preliminary validation of a cognitive flexibility measure in children with autism spectrum disorders. <i>Journal of autism and developmental disorders, 47</i> , 2502-2518. | This study does not relate to absorbing interests. |
| 3. Koegel, R., Kim, S., Koegel, L., & Schwartzman, B. (2013). Improving socialization for high school students with ASD by using their preferred interests. <i>Journal of autism and developmental disorders, 43</i> , 2121-2134. | Participants are not within the age range specified in the inclusion criteria. |
| 4. Jordan, C. J., & Caldwell-Harris, C. L. (2012). Understanding differences in neurotypical and autism spectrum special interests through internet forums. <i>Intellectual and developmental disabilities, 50(5)</i> , 391-402. | Participants are not within the age range specified in the inclusion criteria. |
| 5. Straus, J. N. (2014). Idiots savants, retarded savants, talented aments, mono-savants, autistic savants, just plain savants, people with savant syndrome, and autistic people who are good at things: A view from disability studies. | This study does not relate to absorbing interests. |
| 6. Gillespie-Lynch, K., Kapp, S. K., Shane-Simpson, C., Smith, D. S., & Hutman, T. (2014). Intersections between the autism spectrum and the internet: Perceived benefits and preferred functions of computer- | This study does not relate to absorbing interests. |

- mediated communication. *Intellectual and developmental Disabilities*, 52(6), 456-469.
7. Zuddas, A. (2013). Autism assessment tools in the transition from DSM-IV to DSM-V. *European child & adolescent psychiatry*, 22, 325-327. This study does not relate to absorbing interests.
 8. Sadigurschi, N., & Golan, H. M. (2019). Maternal and offspring methylenetetrahydrofolate-reductase genotypes interact in a mouse model to induce autism spectrum disorder-like behavior. *Genes, Brain and Behavior*, 18(1), e12547. This study does not relate to absorbing interests.
 9. Bolourian, Y., Losh, A., Hamsho, N., Eisenhower, A., & Blacher, J. (2021). General education teachers' perceptions of autism, inclusive practices, and relationship building strategies. *Journal of autism and developmental disorders*, 1-14. This study does not relate to absorbing interests.
 10. Ward, E. K., Braukmann, R., Buitelaar, J. K., & Hunnius, S. (2020). No evidence for neural markers of gaze direction adaptation in 2-year-olds with high or low likelihood of autism. *Journal of Abnormal Psychology*, 129(6), 612. This study does not relate to absorbing interests.
 11. Goldfarb, Y., Gal, E., & Golan, O. (2019). A conflict of interests: A motivational perspective on special interests and employment success of adults with ASD. *Journal of autism and developmental disorders*, 49, 3915-3923. Participants are not within the age range specified in the inclusion criteria.
 12. Reisinger, D. L., Shaffer, R. C., Tartaglia, N., Berry-Kravis, E., & Erickson, C. A. (2020). Delineating repetitive behavior profiles across the lifespan in fragile X syndrome. *Brain sciences*, 10(4), 239. Participants are not Autistic.

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| 13. Sasson, N. J., Dichter, G. S., & Bodfish, J. W. (2012). Affective responses by adults with autism are reduced to social images but elevated to images related to circumscribed interests. | Participants are not within the age range specified in the inclusion criteria. |
| 14. Bailey, C. (2023). 'Neurodivergent literacies': exploring autistic adults' 'ruling passions' and embracing neurodiversity through classroom literacies. <i>Literacy</i> , 57(2), 120-131. | Participants are not within the age range specified in the inclusion criteria. |
| 15. Horovitz, M., Matson, J. L., & Sipes, M. (2011). The relationship between parents' first concerns and symptoms of autism spectrum disorders. <i>Developmental Neurorehabilitation</i> , 14(6), 372-377. | This study does not relate to absorbing interests. |
| 16. Tavernor, L., Barron, E., Rodgers, J., & McConachie, H. (2013). Finding out what matters: validity of quality of life measurement in young people with ASD. <i>Child: care, health and development</i> , 39(4), 592-601. | This study does not relate to absorbing interests. |
| 17. Ames, M., & Weiss, J. (2013). Cognitive behaviour therapy for a child with autism spectrum disorder and verbal impairment: A case study. | This study does not relate to absorbing interests. |
| 18. Runge, K., Tebartz van Elst, L., Maier, S., Nickel, K., Denzel, D., Matysik, M., ... & Endres, D. (2020). Cerebrospinal fluid findings of 36 adult patients with autism spectrum disorder. <i>Brain Sciences</i> , 10(6), 355. | This study does not relate to absorbing interests. Participants are not within the age range specified in the inclusion criteria. |
| 19. Choi, H., Kim, I. S., & Mun, J. Y. (2020). Propionic acid induces dendritic spine loss by MAPK/ERK signaling and dysregulation of autophagic flux. <i>Molecular Brain</i> , 13, 1-11. | This study does not relate to absorbing interests. |
| 20. Parsons, O. E., Bayliss, A. P., & Remington, A. (2017). A few of my favorite things: circumscribed interests in autism are not | Participants are not within the age range specified in the inclusion criteria. |

- accompanied by increased attentional salience on a personalized selective attention task. *Molecular autism*, 8, 1-12.
21. Cho, I. Y., Jelinkova, K., Schuetze, M., Vinette, S. A., Rahman, S., McCrimmon, A., ... & Bray, S. (2017). Circumscribed interests in adolescents with Autism Spectrum Disorder: A look beyond trains, planes, and clocks. *PloS one*, 12(11), e0187414. Participants are not within the age range specified in the inclusion criteria.
 22. Forgeot d'Arc, B., Vinckier, F., Lebreton, M., Soulières, I., Mottron, L., & Pessiglione, M. (2016). Mimetic desire in autism spectrum disorder. *Molecular Autism*, 7, 1-6. This study does not relate to absorbing interests.
 23. Dachez, J., & Ndofo, A. (2018). Coping strategies of adults with high-functioning autism: A qualitative analysis. *Journal of Adult Development*, 25, 86-95. Participants are not within the age range specified in the inclusion criteria.
 24. Barreto, C., Curtin, A., Topoglu, Y., Day-Watkins, J., Garvin, B., Foster, G., ... & Ayaz, H. (2024). Prefrontal Cortex Responses to Social Video Stimuli in Young Children with and without Autism Spectrum Disorder. *Brain sciences*, 14(5), 503. This study does not relate to absorbing interests.
 25. Tamon, H., Itahashi, T., Yamaguchi, S., Tachibana, Y., Fujino, J., Igarashi, M., ... & Aoki, Y. Y. (2022). Autistic children and adolescents with frequent restricted interest and repetitive behavior showed more difficulty in social cognition during mask-wearing during the COVID-19 pandemic: a multisite survey. *BMC psychiatry*, 22(1), 608. This study does not relate to absorbing interests.
 26. Khoo, C. S., & Ramachandram, S. (2022). The Effect of Parent Training Programmes on Screen Time and Social Function in Children with Autism Spectrum Disorder. *The Malaysian Journal of*

- Medical Sciences: MJMS*, 29(6), 146.
27. Kerns, C. M., Winder-Patel, B., Iosif, A. M., Nordahl, C. W., Heath, B., Solomon, M., & Amaral, D. G. (2021). Clinically significant anxiety in children with autism spectrum disorder and varied intellectual functioning. *Journal of Clinical Child & Adolescent Psychology*, 50(6), 780-795. This study does not relate to absorbing interests.
 28. Kundu, G. K., & Islam, R. (2021). The Genetics of Autism Spectrum Disorder-A Review. *Journal of Bangladesh College of Physicians & Surgeons*, 39(3). This study does not relate to absorbing interests.
 29. Ochi, K., Ono, N., Owada, K., Kojima, M., Kuroda, M., Sagayama, S., & Yamasue, H. (2019). Quantification of speech and synchrony in the conversation of adults with autism spectrum disorder. *PloS one*, 14(12), e0225377. This study does not relate to absorbing interests.
 30. Coutelle, R., Weiner, L., Paasche, C., Pottelette, J., Bertschy, G., Schröder, C. M., & Lalanne, L. (2021). Autism spectrum disorder and video games: Restricted interests or addiction?. *International Journal of Mental Health and Addiction*, 1-22. Systematic Review
 31. Zilli, C., Parsons, S., & Kovshoff, H. (2020). Keys to engagement: A case study exploring the participation of autistic pupils in educational decision-making at school. *British Journal of Educational Psychology*, 90(3), 770-789. This study does not relate to absorbing interests.
 32. Solazzo, S., Kojovic, N., Robain, F., & Schaer, M. (2021). Measuring the emergence of specific abilities in young children with autism spectrum disorders: the example of early hyperlexic traits. *Brain Sciences*, 11(6), 692. Participants are not within the age range specified in the inclusion criteria.

33. Zhou, L., Zhang, L., Xu, Y., Yang, F., & Benson, V. (2022). Attentional engagement and disengagement differences for circumscribed interest objects in young Chinese children with autism. *Brain Sciences*, 12(11), 1461. Participants are not within the age range specified in the inclusion criteria.
34. Cascio, C. J., Foss-Feig, J. H., Heacock, J., Schauder, K. B., Loring, W. A., Rogers, B. P., ... & Bolton, S. (2014). Affective neural response to restricted interests in autism spectrum disorders. *Journal of Child Psychology and Psychiatry*, 55(2), 162-171. Participants are not within the age range specified in the inclusion criteria.
35. Ostrolenk, A., Gagnon, D., Boisvert, M., Lemire, O., Dick, S. C., Côté, M. P., & Mottron, L. (2024). Enhanced interest in letters and numbers in autistic children. *Molecular Autism*, 15(1), 26. Participants are not within the age range specified in the inclusion criteria.

Appendix C - List of Included Studies

1. Carnett, A., Raulston, T., Lang, R., Tostanoski, A., Lee, A., Sigafos, J., & Machalicek, W. (2014). Effects of a perseverative interest-based token economy on challenging and on-task behavior in a child with autism. *Journal of Behavioral Education, 23*, 368-377.
2. Jung, S., & Sainato, D. M. (2015). Teaching games to young children with autism spectrum disorder using special interests and video modelling. *Journal of Intellectual and Developmental Disability, 40*(2), 198-212.
3. Stallings, J. W. (2022). Special interest connection framework: integrating pop culture into art therapy with autistic individuals. *Art Therapy, 39*(3), 121-127.
4. Wood, R. (2023). Autism, intense interests and support in school: From wasted efforts to shared understandings. In *Mapping the Field* (pp. 332-352). Routledge.
5. Kryzak, L. A., & Jones, E. A. (2015). The effect of prompts within embedded circumscribed interests to teach initiating joint attention in children with autism spectrum disorders. *Journal of Developmental and Physical Disabilities, 27*, 265-284.
6. Daubert, A., Hornstein, S., & Tincani, M. (2015). Effects of a modified power card strategy on turn taking and social commenting of children with autism spectrum disorder playing board games. *Journal of Developmental and Physical Disabilities, 27*, 93-110.
7. El Zein, F., Solis, M., Lang, R., & Kim, M. K. (2016). Embedding perseverative interest of a child with autism in text may result in improved reading comprehension: A pilot study. *Developmental Neurorehabilitation, 19*(3), 141-145.
8. Campbell, A., & Tincani, M. (2011). The power card strategy: Strength-based intervention to increase direction following of children with autism spectrum disorder. *Journal of Positive Behavior Interventions, 13*(4), 240-249.
9. Koegel, R.L., Oliver, K. & Koegel, L.K. (2018). The impact of prior activity history on the influence of restricted repetitive behaviors on socialization for children with highfunctioning autism. *Behavior Modification, 42*(1), 34-57.
10. Ulu Aydin, H., Cifci Tekinarslan, I., & Gulec Aslan, Y. (2023). The power card strategy: strength-based intervention against bullying for children with autism spectrum disorder. *Journal of autism and developmental disorders, 1*-24.
11. Porter, N. (2012). Promotion of pretend play for children with high-functioning autism through the use of circumscribed interests. *Early Childhood Education Journal, 40*, 161-167

Appendix D - Mapping the Field: Overview of Study Characteristics

| Study | Aims | Design | Participants | Data Collection | Data Analysis | Intervention | Findings |
|-----------------------|---|---|---|--|---|---|---|
| Carnett et al. (2014) | To investigate the effects of an absorbing interest-based token economy on on-task behaviour and behaviour that challenges. | Single-Subject, Alternating Treatments Design | <i>N</i> = 1, male, 7 years old, Autism diagnosis, Autistic identity confirmed using screeners. | Interval recording at baseline and during two intervention conditions. | Quantitative, percentage of intervals with on-task and challenging behaviour at baseline compared with intervention conditions. | Absorbing interest-based token economy. The child received jigsaw puzzle (absorbing interest) tokens as a reward for on-task behaviour. | There was a decrease in challenging behaviour and an increase in on-task behaviour from baseline levels in both token-economy conditions. The condition involving absorbing interests yielded greater on-task |

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| | | | | | | | behaviour and less challenging behaviour than the condition involving neutral tokens. |
| Jung & Sainato (2015) | To investigate the effectiveness of embedding children's absorbing interests within a video modelling intervention on their engagement in play with peers. | Single-Subject Multiple-probe across participants design. | N = 3, (one female, two males), aged 5-6 years, Autism diagnosis. | Partial interval recording during baseline, maintenance, follow-up and generalisation conditions. | Quantitative, percentage of intervals with verbal and non-verbal engagement and social engagement compared across conditions. | Video Modelling intervention to teach play skills using games embedded with absorbing interests (Mickey Mouse and Disney Princesses). | There was an increase in verbal and non-verbal engagement and social engagement following intervention. There was a decrease in inappropriate behaviour. Results were |

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| | | | | | | | maintained at follow-up and generalisation conditions. |
| Stallings (2022) | To explore how the integration of absorbing interests facilitates the therapeutic relationship and process in art therapy with Autistic children. | Qualitative. | N = 6, aged 7-15, Autism diagnosis. | Retrospective observation across case notes, video footage and walk-through interview recording. | Grounded theory analysis across the three data sources. | Integration of absorbing interests in popular culture in art therapy. | Six therapeutic functions of absorbing interests were elucidated: behavioural reward, social initiator, social facilitator, personal metaphor, anxiety mediator, communication clarifier. |

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| Wood (2023) | To investigate the role and function of absorbing interests in educational outcomes for Autistic students. | Qualitative. | N = 10 children, 36 teachers, 10 parents. | Interviews, focus groups, questionnaires, observation. | Thematic Analysis. | Considers the role of intense interests in education from the perspective of Autistic children and their supportive adults. | Enabling participants to access their interests led to increased task engagement and peer interactions. It also promoted greater child-led task initiation and completion. |
| Kryzak & Jones (2014) | To investigate the effectiveness of prompting while engaging in absorbing interest-related | Single-Subject Multiple probe design across participants. | N = 3, male, aged 2-8 years, Autism diagnosis. | Parent-reported questionnaires about absorbing interests, multiple stimulus | Comparison of percentage of target behaviours recorded during baseline, intervention | Prompt fading and reinforcement during activities embedded with absorbing interests | Increased initiated joint attention while engaging in absorbing interest activities was reported for |

activities on initiating joint attention.

preference assessment, event recording of target behaviour (eye contact in response to prompt) during three phases: baseline, intervention and generalisation.

and generalisation phases.

(Wiggles, trains, alphabet) to teach initiated joint attention.

two participants. There were inconsistencies in generalisation across activities, settings and partners.

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| Daubert, Hornstein & Tincani (2015) | To examine the effectiveness of a modified Power Card strategy in teaching turn- | Single-Subject Multiple probe across conditions design. | N = 2, male, aged 9-10 years, Autism diagnosis. | Event recording of three target behaviours: initiating a turn, relinquishing a | Comparison of percentage of target behaviours recorded during baseline, | Power card strategy including the children's absorbing interests (Ninja Turtles) | Findings indicated increases in turn-taking associated with use of the Power Card |
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| <p>taking during play with peers.</p> | <p>turn, appropriate commenting during baseline, intervention and maintenance phases.</p> | <p>intervention and maintenance phases.</p> | <p>used to teach turn-taking behaviours associated with three board games.</p> | <p>strategy during game play. Results were maintained post-intervention.</p> |
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| <p>El Zein et al. (2016)</p> | <p>To determine the impact of embedding absorbing interests in a reading comprehension intervention.</p> | <p>Single-Subject Alternating treatments design.</p> | <p>N = 1, male, aged 8, Autism diagnosis.</p> | <p>Direct observation, teacher and student questionnaires about absorbing interest, free operant preference assessment, two</p> | <p>Reading comprehension scores were compared across absorbing interest and neutral conditions.</p> | <p>Absorbing interest (cars) embedded within reading texts used in reading comprehension intervention.</p> | <p>Findings showed improvements in reading comprehension when the child's absorbing interest was embedded in the reading text.</p> |
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curriculum-based reading comprehension measures.

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| Campbell & Tincani (2011) | To evaluate the effectiveness of the Power Card strategy on promoting direction following with Autistic children. | Single-Subject Multiple-baseline across participant design. | N = 3 children, (2 male, 1 female), aged 6 years, Autism diagnosis. | Functional Analysis Screening Tool, observation and teacher interview to determine absorbing interest, Event recording, social validity questionnaire. | Comparison of percentage of target behaviours recorded during baseline, intervention and maintenance phases. | Power Card strategy including children's absorbing interests (trains, characters from Disney's movie Up, character from Starfall educational website) used to teach students appropriate | Findings revealed that the Power Card strategy was effective in increasing direction following. This increase was maintained following intervention for two of three participants. There is good |
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direction
following. social validity
reported.

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| <p>Koegel, Oliver & Koegel (2018)</p> | <p>To explore how activity history can influence Autistic children's socialisation during activities that include absorbing interests.</p> | <p>Single- Subject Alternating treatments experimental design.</p> | <p>N = 2, male, aged 8-9 years, Autism diagnosis.</p> | <p>Semi- structured interviews, direct observation, Child Affect and Interest Scale, partial interval recording, social validation survey.</p> | <p>Comparison of percentage of intervals of engagement and child interest and affect during baseline and both negative and positive activity conditions.</p> | <p>Absorbing interests (cars, Super Mario) embedded in activities with both positive and negative history to evaluate the impact on Autistic children's engagement, social initiations and affect</p> | <p>Incorporating absorbing interests into activities with a positive history resulted in improvements in play, positive affect and social engagement. Incorporating absorbing interests into non-preferred</p> |
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| | | | | | | | activities did not improve engagement. |
| Ulu Aydin, Cifci Tekinarslan & Gulec Aslan (2023) | To evaluate the effectiveness of the Power Card strategy to teach Autistic students coping skills to respond to bullying. | Single-Subject Multiple probe across participant design. | N = 3 children, (2 male, 1 female), aged 7-9 years, Autism diagnosis, N = 3 parents, N = 3 teachers, N = 1 school psychologist. | Special Interest Assessment Questionnaire, event recording, semi-structured interviews. | Graphical analysis of baseline, intervention, maintenance and generalisation phases. | Power card strategy including children's absorbing interest (piano, Roblox, Huggy Wuggy plush toy) to teach coping skills to respond to bullying. | Findings indicated that the Power Card strategy was effective in teaching children coping strategies to respond to bullying scenarios. Coping skills acquired were maintained post-intervention and children |

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|---------------|---|--|--|--------------------------------------|----------------------------------|---|--|
| | | | | | | | showed ability to generalise skills learned. |
| Porter (2012) | To describe effective methods of developing Autistic children's pretend play skills using their absorbing interest. | Single-case descriptive case study, Qualitative. | N = 1, male, aged 5, Autism diagnosis. | Direct observation of child in play. | Descriptive case study analysis. | Absorbing interest (trains) embedded in play activities to develop pretend play skills. | Findings indicated that incorporating a child's absorbing interest in play can foster a variety of play skills including collaborating with peers, expanding pretend play and using materials. |

Appendix E - Weight of Evidence Scoring Protocols

WOE A: Critical Appraisal Skills Programme Tool - Qualitative

| Study | <i>Was there a clear statement of the aims of the research?</i> | <i>Is a qualitative method appropriate?</i> | <i>Was the design appropriate to address the aims of the research?</i> | <i>Was the recruitment strategy appropriate to the aims of the research?</i> | <i>Was the data collected in a way that addressed the research issue?</i> | <i>Has the relationship between researcher and participants been adequately considered?</i> | <i>Have ethical issues been considered?</i> | <i>Was the data analysis sufficiently rigorous?</i> | <i>Is there a clear statement of findings?</i> | <i>How valuable is the research?</i> | Total |
|-------------------------|---|---|--|--|---|---|---|---|--|--------------------------------------|-------|
| Stalling s (2022) | 1 | 2 | 2 | 1 | 1 | 1 | 0 | 1 | 2 | 4 | 13 |
| Wood (2023) | 2 | 2 | 2 | 0 | 1 | 0 | 0 | 2 | 2 | 4 | 13 |
| Porter (2012) | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 8 |

WOE A: Quality Indicators Within Single-Subject Research (Horner et al., 2005)

| Criterion | Carnett et al. (2014) | El Zein et al. (2016) | Daubert, Hornstein & Tincani (2015) | Koegel, Oliver & Koegel (2018) | Kryzak & Jones (2014) | Campbell & Tincani (2011) | Jung & Sainato (2015) | Ulu Aydin, Cifci Tekinarslan & Gulec Aslan (2023) |
|---|-----------------------|-----------------------|-------------------------------------|--------------------------------|-----------------------|---------------------------|-----------------------|---|
| Description of Participants and Settings | | | | | | | | |
| Participants are described with sufficient detail (e.g. age, gender, diagnosis) | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| Participants selection | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |

process is
described
with
replicable
precision

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Physical setting described with replicable precision | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 |
|---|---|---|---|---|---|---|---|---|

Dependent
Variable

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Dependent variables described with operational precision | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Dependent variables are measured with a procedure that generates a quantifiable index | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Measurement of dependent variable is valid and described with replicable precision. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| Dependent variables are measured | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

repeatedly
over time

Data are
collected on
reliability or
interobserver
agreement

1 1 1 1 1 1 1 1 1

Independent
variable

Independent
variable
described
with
operational
precision

1 1 1 1 1 1 1 1 1

Independent
variable
systematicall

1 1 1 1 1 1 1 1 1

y
manipulated

Measurement
of fidelity of
implementati
on

1 0 1 0 1 1 1 1

Baseline

Includes a
baseline
phase that
provides
repeated
measurement
of dependent
variable

1 0 1 1 1 1 1 1

Baseline
phase is
described
with

1 0 1 1 1 1 1 1

replicable
precision

Internal
Validity

| | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|
| Design | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|--------|---|---|---|---|---|---|---|---|

provides
minimum
three
demonstratio
ns of
experimental
effect at three
timepoints

| | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
|--------|---|---|---|---|---|---|---|---|

controls for
common
threats to
internal
validity

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Results document a pattern that demonstrates experimental control | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
|---|---|---|---|---|---|---|---|---|

External Validity

| | | | | | | | | |
|--|---|---|---|---|---|---|---|---|
| Experimental effects are replicated across participants, settings or materials | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
|--|---|---|---|---|---|---|---|---|

Social Validity

| | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|
| Dependent variable is | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|-----------------------|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|--|
| socially important | | | | | | | | | |
| Magnitude of change in dependent variable is socially important | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | |
| Implementation of independent variable is practical and cost effective | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |
| Study validity is enhanced by implementation of the independent | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | |

variable over
extended
time periods,
by typical
intervention
agents, in
typical
physical and
social
contexts

| | | | | | | | | |
|-------|----|----|----|----|----|----|----|----|
| Total | 19 | 15 | 19 | 18 | 17 | 21 | 20 | 17 |
|-------|----|----|----|----|----|----|----|----|

Criteria for WOE B

| Design | WoE Rating | Rationale |
|--|------------|---|
| Qualitative Research, Mixed-Methods Research, Participatory Approaches | 3 | The current research seeks to understand the experiences of Autistic children, their parents and teachers, as well as the impact and feasibility of absorbing interest-based interventions. Qualitative, mixed-methods and participatory approaches illuminate experiential evidence (Glasby, Walshe & Harvey, 2007) and facilitate nuanced, rich understanding of individuals' experiences by including the voice of key stakeholders. Such designs are cognisant of contextual factors that provide valuable information regarding the impact and feasibility of the intervention and help to shape its future implementation (Glasby, Walshe & Harvey, 2007). Studies weighted highly included detail of specific experiences. |
| Qualitative Case Studies, Descriptive Case Studies | 2 | Qualitative Case Studies provide nuanced, rich insights into individual experiences and can yield valuable information on the impact and feasibility of an intervention within a particular context. However, limitations exist in relation to generalisability (Glasby, Walshe & Harvey, 2007). |
| Randomised control trials, Quasi-Experimental Designs, Single-Subject Research | 1 | Although useful in evaluating effectiveness of interventions, highly controlled experimental research is deemed least appropriate for addressing research questions seeking to understand the experiences of Autistic children, their parents and teachers, as well as the impact and feasibility of an interventions. Highly standardised design and delivery of an intervention may not always be ethical or appropriate for children with complex additional needs (Glasby, Walshe & Harvey, 2007). Moreover, such research designs neglect to include perspectives of key stakeholders involved in the intervention. |

WOE B Scores

| Study | Rating |
|---|--------|
| Carnett et al. (2014) | 1 |
| Jung & Sainato (2015) | 1 |
| Stallings (2022) | 2 |
| Wood (2023) | 3 |
| Kryzak & Jones (2014) | 1 |
| Daubert, Hornstein & Tincani (2015) | 1 |
| El Zein et al. (2016) | 1 |
| Campbell & Tincani (2011) | 1 |
| Koegel, Oliver & Koegel (2018) | 1 |
| Ulu Aydin, Cifci Tekinarslan & Gulec Aslan (2023) | 1 |
| Porter (2012) | 2 |

Scoring Protocol Weight of Evidence C

| Study | Population | Intervention | Outcome | Context | Total |
|---|------------|--------------|---------|---------|-------|
| Carnett et al. (2014) | 1 | 2 | 3 | 2 | 8 |
| Jung & Sainato (2015) | 1 | 3 | 3 | 3 | 10 |
| Stallings (2022) | 1 | 1 | 2 | 1 | 5 |
| Wood (2023) | 3 | 1 | 3 | 2 | 9 |
| Kryzak & Jones (2014) | 1 | 3 | 2 | 2 | 8 |
| Daubert, Hornstein & Tincani (2015) | 1 | 3 | 3 | 3 | 10 |
| El Zein et al. (2016) | 1 | 3 | 3 | 2 | 9 |
| Campbell & Tincani (2011) | 1 | 3 | 3 | 3 | 10 |
| Koegel, Oliver & Koegel (2018) | 1 | 3 | 3 | 3 | 10 |
| Ulu Aydin, Cifci Tekinarslan & Gulec Aslan (2023) | 1 | 3 | 3 | 3 | 10 |
| Porter (2012) | 1 | 2 | 2 | 1 | 6 |

Criteria for WOE C using PICO Framework

| Criteria | WoE Rating | Rationale |
|-----------------|--|---|
| A. Population | <p>High = 3</p> <p>Autistic children are directly involved in the study as participants. The study includes the voice of Autistic children and elicits the perspectives of their parents and teachers in relation to absorbing interests.</p> <p>Medium = 2</p> <p>Autistic children are directly involved in the study as participants. The study elicits the perspectives of their parents and teachers on absorbing interests but does not include the Autistic voice.</p> <p>Low = 1</p> <p>Autistic children are directly involved in the study as participants. The study does not elicit the perspectives of Autistic children, their parents or teachers on absorbing interests.</p> | <p>The experiences of Autistic children, their parents and teachers are the focus of the research questions. Therefore, highest weighting will be given to studies that include all three perspectives.</p> |
| B. Intervention | <p>High = 3</p> <p>The study includes an absorbing interest-based intervention relating to educational outcomes.</p> <p>Medium = 2</p> <p>The study includes an absorbing interest-based intervention relating to outcomes outside of the context of education.</p> <p>Low = 1</p> <p>The study does not include an intervention.</p> | <p>The review questions pertain to the impact of an absorbing interest-based intervention on supporting progress towards individual educational targets.</p> |
| C. Context | <p>High = 3</p> <p>The study takes place within a primary school setting.</p> <p>Medium = 2</p> <p>The study takes place within a setting outside of the educational context e.g. home or community.</p> <p>Low = 1</p> | <p>The current research is situated within the context of education for Autistic children at primary school level.</p> |

The setting of the study is not identified or described.

D. Outcome

High = 3

The study evaluates the impact of the intervention on Autistic children's outcomes. Social validity data is collected.

Medium = 2

The study evaluates the impact of the intervention on Autistic children's outcomes. No social validity data is collected.

Low = 1

The study does not evaluate the impact of the intervention on Autistic children's outcomes. No social validity data is collected.

Research will be highly relevant to the review question if it considers the impact of an absorbing interest-based intervention on Autistic children's outcomes, as well as providing insights into the acceptability and feasibility of the intervention from the perspective of key stakeholders.

WOE Scores

| Study | WoE A Methodological Quality | WoE B Methodological Relevance | WoE C Topic Relevance | WoE D Overall quality and relevance | Descriptor |
|--|---------------------------------|--------------------------------------|--------------------------|---|------------|
| Carnett et al. (2014) | 19/21 = 0.90 | 1/3 = 0.33 | 8/12 = 0.67 | 1.9 | Medium |
| Jung & Sainato (2015) | 20/21 = 0.95 | 1/3 = 0.33 | 10/12 = 0.83 | 2.11 | High |
| Stallings (2022) | 13/20 = 0.65 | 2/3 = 0.66 | 5/12 = 0.42 | 1.73 | Medium |
| Wood (2023) | 13/20 = 0.65 | 3/3 = 1.0 | 9/12 = 0.75 | 2.4 | High |
| Kryzak & Jones (2014) | 17/21 = 0.81 | 1/3 = 0.33 | 8/12 = 0.67 | 1.81 | Medium |
| Daubert, Hornstein & Tincani (2015) | 19/21 = 0.90 | 1/3 = 0.33 | 10/12 = 0.83 | 2.06 | Medium |
| El Zein et al. (2016) | 15/21 = 0.71 | 1/3 = 0.33 | 9/12 = 0.75 | 1.79 | Medium |

| | | | | | |
|---|----------------|--------------|----------------|------|--------|
| Campbell & Tincani (2011) | $21/21 = 1.0$ | $1/3 = 0.33$ | $10/12 = 0.83$ | 2.16 | High |
| Koegel, Oliver & Koegel (2018) | $18/21 = 0.86$ | $1/3 = 0.33$ | $10/12 = 0.83$ | 2.02 | Medium |
| Ulu Aydin, Cifci Tekinarslan & Gulec Aslan (2023) | $17/21 = 0.81$ | $1/3 = 0.33$ | $10/12 = 0.83$ | 1.97 | Medium |
| Porter (2012) | $8/20 = 0.40$ | $2/3 = 0.66$ | $6/12 = 0.50$ | 1.56 | Low |

Appendix F - Validity Frameworks

A Tool for Evaluating Reflexive Thematic Analysis - Adapted from Braun & Clarke (2021)

| Criteria | Evaluation |
|--|------------|
| Adequate choice and explanation of methodology | |
| 1. Is the rationale for using RTA explained and justified? | Yes |
| 2. Is RTA consistent with the research questions and aims? | Yes |
| 3. Are the theoretical underpinnings of RTA clearly specified? | Yes |
| 4. Does RTA align with the theoretical and conceptual underpinnings of the research? | Yes |
| 5. Does RTA align with the data collection methods used? | Yes |
| 6. Is RTA enacted consistently throughout the paper? | Yes |
| 7. Is there evidence of problematic assumptions and practices associated with RTA? | No |
| 8. Does the researcher identify her own positionality and perspectives? | Yes |
| 9. Are the analytic procedures used clearly outlined and described? | Yes |
| 10. Is there evidence of procedural and conceptual confusion e.g. use of codebooks or inter-rater reliability measures with RTA, references to generalisability? | No |
| A well-developed and justified analysis | |
| 11. Are themes clearly defined and organised in the report? | Yes |
| 12. Are themes fully realised patterns of shared meaning organised around a central concept? | Yes |
| 13. Do the reported themes have potential to give rise to actionable outcomes? | Yes |

A Tool Evaluating a Qualitative Case Study (Informed by Stake, 1995)

| Criteria | Evaluation | Comments |
|---|----------------------------------|---|
| <p>Description of Context</p> <ul style="list-style-type: none"> • Does the study clearly describe the specific context or setting of the case? • Is the case bounded by time, space, or phenomenon in a way that provides clarity to the study's scope? • Is context to the research question? | <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>Research setting is described.</p> <p>The phenomenon of absorbing interests bounds the case.</p> <p>Context is provided within an extensive literature review and overview of current policy and practice.</p> |
| <p>Case Definition and Boundaries</p> <ul style="list-style-type: none"> • Are the cases clearly defined? • Does the study justify why the cases were selected? • Do the cases contribute to understanding the research question? | <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>Each case is clearly defined as a child, parent, teacher triad.</p> <p>Inclusion criteria for selection of cases are described and justified.</p> <p>The cases selected contribute unique, authentic insights to address the research questions.</p> |
| <p>Richness of Data</p> <ul style="list-style-type: none"> • Does the study provide a rich, detailed description of the case? • Is there triangulation of data from different sources? • Does the study represent the voices of participants in their own words? | <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>Thick descriptions of each case are provided.</p> <p>Mosaic approach, observational, interview and reflective dialogue data are triangulated.</p> <p>Participant quotes were transcribed and represented verbatim in the findings.</p> |
| <p>Credibility and Trustworthiness</p> <ul style="list-style-type: none"> • Was the researcher engaged for a sufficient period to gain trust, develop insights, and observe | <p>Yes</p> | <p>An observation period was incorporated to facilitate familiarisation prior to data collection.</p> |

| | | |
|---|---|--|
| <p>the case in its natural environment?</p> <ul style="list-style-type: none"> • Were multiple methods, data sources, or theoretical perspectives used to verify the findings? • Has the researcher made a strong case for the adequacy of their data collection and analysis process? • Were the participants or stakeholders involved in verifying the findings or interpretations? • Did the researcher consult with peers or colleagues to discuss the study's findings, methodologies, and interpretations? | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>Mosaic approach, observational, interview and reflective dialogue data are triangulated.</p> <p>The strengths of data collection and analysis processes were considered and limitations were mitigated.</p> <p>Through the Mosaic Approach and reflective dialogues, children and teachers received opportunities to verify interpretations.</p> <p>Methodologies were validated by the children's teacher and by an expert in the field.</p> <p>Findings and interpretations were discussed with the research supervisors.</p> |
| <p>Interpretation and Reflexivity</p> <ul style="list-style-type: none"> • Does the researcher reflect on their own positionality, background, and potential biases that may affect the interpretation of data? • Are the interpretations of the data well-supported by evidence? • Are alternative interpretations considered and discussed? • Did the researcher engage in an iterative process of analysis, where data is revisited multiple times to refine understanding and ensure consistent interpretations? | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>A reflexive journal was used throughout the research process. The researcher's positionality is outlined.</p> <p>Verbatim quotes and artefacts are used to illustrate interpretations.</p> <p>The researcher acknowledges subjectivity and sought perspectives of research supervisors to develop richer interpretations.</p> <p>A systematic, iterative approach to data coding was employed.</p> |
| <p>Transferability</p> <ul style="list-style-type: none"> • Does the study provide enough context and detail to allow others to understand whether and how the findings may apply to other settings, cases, or populations? | <p>Yes</p> <p>Yes</p> | <p>Thick descriptions of the setting and participants are provided.</p> |

| | | |
|---|----------------------------------|--|
| <ul style="list-style-type: none"> Does the case study contribute to theoretical knowledge or existing literature? | | <p>The findings contribute to and build on existing understandings on Autistic children's absorbing interests.</p> |
| <p>Ethical Considerations</p> <ul style="list-style-type: none"> Did the study ensure that participants were informed about the purpose of the research, their rights, and the use of their data? Were steps taken to protect participants' confidentiality and anonymity? Did the researcher demonstrate an awareness of the ethical implications of their interactions with participants? | <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>Information sheets and consent/assent forms were provided to all participants.</p> <p>Data were anonymised and pseudonyms are used. All data were stored securely.</p> <p>The research was approved by Mary Immaculate Research Ethics Committee (MIREC). This required completion of a child-safeguarding statement and Data Protection Impact Assessment.</p> |

Appendix G - Reflexive Journal Entries

Example of research diary entry following pilot data collection session

Post-Pilot Reflection

- 2 out of 7 children have SI
- **Importance of space** – conducting in main classroom – distractions, noise, helpful for teacher/SNA to be present – child feeling safe, familiar space. Change from main classroom to small room off classroom?
- Need for incorporating my activities in child's **visual schedule** – they rely heavily on this, can be disruptive to their day if there are unexpected changes/activities.
- **Working individually** – best way to gain data, more manageable to record.
- Pair work – interesting to hear how child engages with peer around Absorbing Interest and how it can lead to conversations about other topics (e.g. Pokemon - video games, planning play dates, comparisons and understandings – I like Pokemon but not as much as E). Prompted discussion on how she feels if others are not as interested in Pokemon as her.
- **Barriers to engagement** – child's mood on day – one child overwhelmed had Confirmation yesterday, difficult to engage him. Another child – own agenda, wanted to make a tower of yellow blocks instead of using Lego to tell me about interests – difficult to focus.
- 3 children I worked with did not have SI but useful to trial methods and see how they responded/engaged.
- **Drawing techniques worked very well** for children who were less comfortable engaging in verbal communication – reduced demands, allowed for prompts.
- Importance of incorporating their regular supports – movement breaks, ear defenders, visual schedule.
- Giving **choice** between lego/playdough works well
- **Clear visuals** for ideal playtime drawing activity

Example of research diary entry following discussion with teacher and SNA

Discussion with teacher and SNA around all-consuming nature of Special Interests

- Can lead to challenging behaviours when they are removed/restricted
- Parent/teacher expectations – wanting to put boundaries re screen time, wanting child to be able to converse with peers around a variety of topics – balancing neurotypical demands with what's right for the child
- Described as like an 'obsession' 'addiction'
- Teacher needing support to 'contain' special interest – how can I support this in a way that is not restrictive and that is evidence-based
- Teacher/SNA understanding of differentiation between SI and hobby. Interesting for me to observe stark difference between what is a hobby/interest and what is a SI.

Example of research diary entry following observation period

Reflection on my role as researcher – power dynamic

- Dynamics of going into classroom – teacher's expectations of trainee psychologist – managing expectations within remit/scope of research.
- Role confusion – substitute teacher? Trainee psychologist as adviser/problem solver, expert vs novice in this setting – impacted my own confidence/self-assurance on the day.
- Managing diversions – SNA talking about her own Autistic child – seeking advice, saying things that do not align with some of my values/understanding of Autism (child should be more socially motivated, put more time into people than the playstation). Advice from SNA to be more firm, me wanting to respect child's cues around assent.
- Communicating my knowledge of the evidence base around special interests whilst respecting practicalities and challenges that the teacher is grappling with in the classroom.
- I don't know children yet so cannot advise on everything, teacher is experienced – may have more answers to certain things than me.
- Unfamiliar adult in classroom – anxiety inducing for children? Not wanting to distress or overwhelm children. Sit in background as observer but also want to develop rapport with children.

Appendix H - Recruitment email – For Principal and Chairperson of Board of Management



Dear Mr/Ms. _____,

My name is Elle Drohan and I am a Trainee Psychologist on the Doctorate in Educational and Child Psychology (DECPsy) Programme in Mary Immaculate College, Limerick. I previously qualified with a B.Ed in Education and Psychology and I have three years teaching experience.

As part of the DECPsy programme, I am undertaking a Doctoral Thesis to explore how Autistic children's absorbing interests can be used to support their learning. My research is being conducted under the supervision of Dr. Emer Ring and Dr. Lisha O' Sullivan. As well as completing a thorough review of the literature in this area, I also aim to carry out a case study in an Autism class in a primary school. We hope to complete data collection for this research project between February – June 2024. I am writing to invite the teachers and children in the Autism class in your school to participate in this case study.

I have attached an Information Sheet which outlines the details and aims of the study. Should a teacher wish to participate, they will be asked to select 2-5 children in their class who a) have an Autism diagnosis and b) have an absorbing interest. The children's parent/guardians must consent to their child's participation in the study by signing the consent form attached.

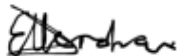
For the teacher, participation will involve implementing an absorbing interest intervention with Autistic children in the classroom setting. As the researcher, I will conduct a face-to-face session with the children pre-intervention, using various child-friendly approaches to gain their perspectives on their absorbing interests and to collect data which will inform the creation of an 'Interest Map'. I will then support the teacher to use the 'Interest Map' to link the child's absorbing interest with curricular targets identified in their Student Support Plan (SSP). Furthermore, I will provide support to the teacher to use the Interest Map to plan lessons and activities based on the child's absorbing interest that will promote learning and progress towards their individual learning targets. The teachers involved in the child's SSP (e.g. class teacher and Special Education Teacher) will implement the Interest Map in lessons and activities with the child and record their progress over a period of 6-8 weeks.

Following the intervention period, I hope to engage in semi-structured interviews with the class teacher, Special Needs Assistant(s), Special Education Teacher(s) and parent/guardians of the children who are participating in the study. I believe that documenting these perspectives will greatly enhance the project and enable a deeper understanding of the impact of absorbing interests on Autistic children's lives at home and in school. Importantly, I believe that this research will contribute to the development of inclusive, strengths-based and neuro-affirmative educational policies and practices that can be used to support Autistic children in Irish classrooms.

Please note that participation in this research is completely voluntary and you may withdraw at any time without consequence. All electronic and written information will be anonymised using pseudonyms and confidentiality will be maintained. The researcher will adhere to the legislation governing GDPR throughout the research project. All data collected for the research will be stored securely on a Mary Immaculate College (MIC) One Drive account which only the researcher has access to. Following completion of the study and in accordance with the MIC Data Retention Policy, anonymised data gathered may be retained indefinitely as required by the researcher. Anonymised data may be used in an anonymous form in any publications or presentations stemming from this research.

In the event that you are interested in participating in the research, please contact me via email [REDACTED] or via my mobile phone at [REDACTED] I will then follow up to arrange a date and a time that suits for the pre-intervention session with the children and for post-intervention interviews. Should you require further clarification prior to finalising your decision on whether to participate in the research, please do not hesitate to contact me. This research study has received Ethics approval from the Mary Immaculate College Research Ethics Committee (MIREC) (reference number: A23-052). If you have any concerns about this study and wish to contact an independent authority, you may contact: Mary Collins, MIREC Administrator, Mary Immaculate College, Limerick. Telephone: 061-204980 E-mail: mirec@mic.ul.ie

Yours sincerely,



Elle Drohan, Trainee Psychologist.

Appendix I - Overview of Data Collection Procedures

| Data Collection | Method | Purpose |
|----------------------------|------------------------|---|
| Mosaic Approach | Ideal Playtime | To provide information on the children's personal constructs relating to their ideal and non-ideal playtimes to generate insights into how the children experience and engage with their absorbing interests. |
| | Lego/Playdough | To enable the children to construct representations of their absorbing interests in a creative format. |
| | Communication Mats | To stimulate discussion with the children on the topic of their absorbing interest. |
| | Photo Voice | To enable children to capture evidence of their absorbing interests and things of personal importance in their school environment. |
| | Researcher Observation | To provide insights into classroom layout, environmental factors and classroom routine. To yield information relating to the children's approach to learning, interaction styles and further elucidate their profiles of strengths and areas for development to inform subsequent data collection. To facilitate familiarisation between the children and the researcher. |
| Semi-Structured Interviews | Parent Interview | To gain parent perspectives on their experiences of absorbing interests and the impact of absorbing interests in the home context, as well as delineating parental perceptions of child's experience of absorbing interests. |
| | Teacher Interview | To gain teacher perspectives on their experiences of absorbing interests and the impact of absorbing interests in the school context, on the child's social, emotional and academic development. |
| | Reflective Dialogues | To co-construct understanding on the impact and feasibility of the Interest Map intervention. To collaboratively identify facilitators and barriers of effectiveness. |

Appendix J - Communication Mat

At School



With who



Feeling



Talking Mat

At home



Why



When



Good Things/Bad



74

Appendix K - Ideal Playtime Drawing Task Instructions

Part 1: *Drawing the kind of playtime you would not like.*

Think about the kind of playtime you would not like. Make a quick drawing of this playtime in the middle of the page. Tell me three things about this playtime. What kind of playtime is this?

For every playtime you need something to play with. What would you play with during a playtime that you would not like? Can you sketch the thing?

Think about the place you would not like your playtime to be in. Make a quick drawing of this place. Draw some things in the place.

Think about the people you would not like to play with. Make a quick drawing of some of these people. What are they doing? Tell me three things about these people.

Think about the kind of playtime you would not like. Make a quick drawing of what you would be doing. Tell me three things about the way you feel during this playtime.

Part 2: *Drawing the kind of playtime you would like.*

Think about the kind of playtime you would like. Make a quick drawing of this playtime in the middle of the page. Tell me three things about this playtime. What kind of playtime is this?

For every playtime you need something to play with. What would you play with during a playtime that you would like? Can you sketch the thing?

Think about the place you would like your playtime to be in. Make a quick drawing of this place. Draw some things in the place.

Think about the people you would like to play with. Make a quick drawing of some of these people. What are they doing? Tell me three things about these people.

Think about the kind of playtime you would like. Make a quick drawing of what you would be doing. Tell me three things about the way you feel during this playtime.

Appendix L - Interest Maps

Reading comprehensions about Pokémon (1,2)

Reading text about Japan – optional follow-up research project about Japan/Pokémon in Japan (1,2)

Adjectives activities (2)

Create your own Pokémon and Fact-file activity (1,2)

Write a report about a Pokémon character (1,2)

Write a story including Pokémon characters (1,2)

Real animal inspiration activity (1,2)

Create a PowerPoint slide about Pokémon of choice and present to peers (2, 5)

Pokémon cutting activity (4)

Pokémon Origami (4)

Pokémon art and crafts activities (4)

Pokémon word problems and maths sheets (3)

Maths tasks using Pokémon game cards e.g. ordering heights/weights, converting heights/weights (3)

Pokémon regulation activity (5)

Pokémon Golden Time (5)

Pokémon card game to play with peer(s) (5)

|

Amelia's Interest Map

Likes collecting Pokémon plushies, trading cards, figurines.

Plays with Pokémon figurines.

Her favourite is Pikachu. Pikachu plushie offers her comfort.

Reads books about Pokémon.

Pokémon

Likes to watch Pokémon videos on YouTube – Official Pokémon channel, hardcore Nuzlocke challenges.

Plays Pokémon video games.

Would love to go to Pokémon tournament one day.

Draws Pokémon characters (likes to copy from images online).

IEP Targets

1. Amelia will increase English comprehension scores to above the 10th percentile.
2. Amelia will increase English vocabulary skills to above the 30th percentile.
3. Amelia will increase maths scores to above 13th percentile.
4. Amelia will demonstrate measurable improvement and confidence in fine motor coordination, leading to enhanced handwriting and cutting abilities.
5. Amelia will demonstrate enhanced emotional well-being and a strengthened sense of belonging by exhibiting improved emotional regulation, establishing positive relationships with peers and teacher, actively participating in school activities and effectively using learned coping strategies.

Literacy Activities – Target 4

Reading comprehensions about Pokémon - identify spellings, new vocabulary

Adjectives activities

Create your own Pokémon and Fact-file activity

Write a report about a Pokémon character

Write a story/comic strip including Pokémon characters

Social Activities – Targets 1&2

Complete real animal inspiration project with peer

Create a PowerPoint slide about Pokémon of choice and present to/with peers

Pokémon art and crafts activities /drawing activity with peers

Play Pokémon card game with peers

Pokémon activity sheet with peers

Games – Bingo, Guess who, 20 questions, break the code

Pokémon Trivia Quiz

Emotional Regulation – Target 3 Pokémon regulation activity

Pokémon Feelings Check-in

Create your own Pokémon activity – developing coping strategies.

Pokémon Power Card

Access to Pokémon activities (e.g. books, music, colouring) for regulation breaks

Luke's Interest Map

Likes collecting Pokémon cards, enjoys trading/battling cards.

His favourite Pokémon is Charizard.

Reads books about Pokémon.

Enjoys colouring Pokémon characters and creating new Pokédex.

Pokémon

Likes to watch Pokémon videos on YouTube – Pokémon Animé, Official Pokémon channel, Nuzlocke challenges.

Listens to Pokémon music and soundtracks.

Enjoys talking to others about Pokémon – uncle, brother, mum.

Collects Pokémon plushies.

Plays Pokémon games on his Gameboy.

SSP Targets

1. Luke will increase his ability to play games with peers in a group by following rules and listening to others.
2. Luke will use full sentences in conversations with others.
3. Luke will develop emotional regulation skills using strategies such as deep breathing, chill out time, feelings check-in and sensory breaks.
4. Luke will increase his accuracy in spelling.

Literacy Tasks (Targets 2&3)

- Use comic strip template to write and illustrate a story.
- Story Recall - Read a story or text. Illustrate using template to demonstrate comprehension.
- Invent, illustrate and describe a new character.
- Character description – brainstorm adjectives based on puppet video.
- Procedural writing – ‘How to make a Puppet’. Other students could use the instructions in an art lesson.
- Show and Tell – present puppets to the class, create a Powerpoint slide to guide presentation.
- Create a profile for an animated character or puppet.
- Narrative Writing – Write a story about the puppet’s journey to his new home based on video.
- Write a series of diary entries about the puppet’s experiences in his new home.
- Read a story aloud using puppet to narrate story.
- Read extract from Dogman. Write an alternative ending to the story.
- Roll and draw an alien activity. Write a description based on the alien you created.
- Plan and write a role-play involving two puppets. Act out role-play for teacher/peers.
- Learn about and research different types of puppets – create an information booklet.
- Puppet reading comprehensions – option to complete research project on one of the topics.

Maths Problem Solving (Target 1)

- Use drawing as a problem solving strategy.
- Draw a map of a zoo – complete length/area word problems based on drawing.
- Andy Warhol arrays activity
- Shape robot/monster
- Mondrian art – fractions, decimals, percentages

Dylan’s Interest Map

Enjoys drawing animations/comics/cartoon figures.

Enjoys reading comic-style books and stories e.g. Dog man.

Likes to illustrate new stories, make up new characters.

Likes to share his drawings with others e.g. mum.

Drawing Animations and Puppets

Collects puppets. Likes to play with puppets at home.

Makes up stories about puppets. Likes to perform puppet shows by himself and for others – different voices.

Enjoys watching puppet videos on Youtube. Would like to be a puppeteer.

Emotional Regulation (Target 4)

- Naming/acting out emotions on feelings cards using puppets.
- Role playing scenario – how does puppet feel/think/behave
- Model regulation strategies using puppet
- Draw how feelings feel in the body
- Draw comic strip of difficult scenario – use to problem solve (comic strip conversations tipsheet)

SSP Targets

1. Dylan will increase his ability to understand and solve maths words problems using strategies and applying learned concepts.
2. Dylan will demonstrate improvement in his motivation to engage in writing activities.
3. Dylan will increase the quantity of written work produced in literacy activities.
4. Dylan will demonstrate enhanced ability to identify and regulate his emotions in response to unexpected change and when things do not go his way. He will achieve this by practicing emotional literacy skills and developing and effectively using emotional regulation strategies.

Reading Comprehensions – Titanic, Britannic, Dunbrody (3,4)

Write a newspaper report about the Britannic sinking (3, 4)

Create a fact file based on the Titanic (4)

Write a recount/diary entry from the perspective of a survivor on the Titanic (4)

History activity – photo comparison (3)

Geography activity – create a map illustrating where the Titanic/Britannic sailed (3)

Times Tables battleship worksheet (5)

Create a timeline of the events of one of the ship's voyage (5)

Problem solving Titanic worksheets (3, 5)

Make a ship model using art materials - threading, cutting, colouring etc. (1, 3)

Cutting and sticking activities (1, 3)

Ship deck shore or Shipwreck game with peers (2)

Floating boat project (2, 3)

Titanic Morse Code activity (2, 3)

Role play – newspaper report – present with a peer (2)

Create models of ships using Lego/construction materials. Create a sign for each one, outlining key facts and labelling the parts of the ship. Display in classroom 'gallery'. Invite peers to visit the gallery (1, 2, 3)

Callum's* Interest Map

Knows lots of facts about ships – Titanic, Britannic, Lusitania, RMS Carpathia, Queen Elizabeth.

Recites facts about ships. Can name the different parts of the ship.

Particularly interested in the story of how they sank.

Acts out and narrates the ship's story – enjoys telling these stories to others – animated, dramatic accounts/monologues.

Ships

Likes to watch videos about ships on Youtube.


Enjoys making models of ships with Lego/construction toys.

Likes to play with ship models in the sink.

IEP Targets

1. Callum will engage in targeted fine motor activities designed to enhance his handwriting and cutting skills.
2. Callum will demonstrate improved social interaction and problem-solving skills and increased emotional regulation skills.
3. Callum will demonstrate increased resilience and persistence in tasks, effectively manage frustration and exhibit a greater willingness to engage in and complete challenging activities.
4. Callum will improve his ability to access challenging comprehension texts.
5. Callum will develop his fluency and accuracy in relaying maths facts.

Appendix M - Implementation Fidelity Guidelines

- Intervention sessions and lessons will be led by the child's teacher as part of the regular curricular experience at school for a period of four weeks **21/10/24 - 29/11/2024**.
- The teacher will be encouraged to integrate the Interest Map in the child's typical daily learning activities as much as possible/feasible within their classroom context over the intervention period.
- This may include using the Interest Map in group lessons and/or individual sessions with the child. Suggested resources linked with each Student Support Plan target have been provided, however the teacher may adapt and differentiate these as necessary.
- The teacher will record the children's engagement in the intervention by video recording a **minimum of two sessions** with each child per week.
- The video recordings will be shared with the researcher at the end of the intervention to facilitate reflection and post-intervention discussions with the teacher, after which they will be deleted.
- The teacher is also advised to make their own brief notes to record their observations, insights and experiences during the intervention.
- The researcher will be available throughout the intervention via email  to support the teacher in implementing the Interest Map e.g. to answer questions, provide advice, suggest resources etc.
- Following the intervention period, the teachers of children participating will be invited to engage in an individual semi-structured **interview on 29/11/2024**, which will last approximately 30-45 minutes.

Implementation Fidelity Checklist

Intervention Period: 21/10/24 - 29/11/24

Teacher Name: _____

Child(ren) Involved: _____

1. Intervention Delivery and Structure

- Teacher integrated the Interest Map into daily classroom activities e.g. whole class, individual and/or group sessions.
- Sessions followed the format typically used in classroom activities to best suit the learning style of the child.
- Any adaptations made to cater to children's needs were consistent with the overall aims of the intervention.
- Teacher completed sessions linked with Student Support Plan targets specified in the Interest Map.
- Intervention was delivered consistently across all scheduled sessions.
- Teacher followed the structure and goals outlined for the intervention.

2. Documentation and Reflection

- Teacher video-recorded a minimum of two sessions per week with each child.
- Video recordings clearly capture child engagement and involvement during the intervention.
- Teacher maintained brief written notes reflecting on the intervention and documenting observations and insights, as well as noting any challenges encountered.
- Teacher communicated challenges to the researcher during the intervention period to discuss potential solutions.

Appendix N - Interview Schedules

Parent/guardian Interviews

1. Start with a brief discussion about child.
2. Can you tell me about your child's absorbing interest?
3. What does the term absorbing interest/special interest mean for you?
4. What do you feel the absorbing interest means for your child?
5. When did your child first develop an interest in ___? Probe anything prompted interest.
6. Did they ever have other absorbing interests?
7. How often does your child engage with their absorbing interest?
8. How does your child's absorbing interest impact their life or that of the family? Probe: positives/negatives; probe: specific examples; probe: impact on siblings/parents/other family members.
9. Does your child's absorbing interest allow them to make connections with others/engage in other activities?
10. How do you respond to your child's absorbing interest? Probe: Do you ever restrict your child's absorbing interest?
11. Do you feel you need support as a parent on anything relating to your child's absorbing interest?
12. Does your child's absorbing interest impact them in other settings e.g. school/extra-curricular activities?
13. Reference Interest Map intervention – has your child mentioned it?

Teacher Interviews

1. Can you tell me about your experience of working with Autistic children?
2. How would you describe your understanding of an Autistic absorbing/special interest?
3. Can you tell me about what you know about child X's absorbing interest? Probe: have they ever had other absorbing interests?
4. Have you noticed patterns/differences in absorbing interests between children you have taught e.g. based on gender/age?
5. Before the intervention, did child X ever engage with their absorbing interest in school? Probe: examples of activities. If yes, what were the positive/negative implications of this? Probe re motivator – how would you know that the child is more motivated, what does this look like?
6. Delve into idea of using absorbing interest as a reward if this comes up – structured system? Positive/negative effects?
7. Before the intervention, how would you describe child X's learning?
8. Can you tell me about how child X engaged with the Interest Map?
9. What, if any, did you feel was the impact of the Interest Map?
10. Do you feel that the Interest Map helped the children to progress towards their SSP targets? In what way?
11. How feasible was the Interest Map to create and use? Probe: was it worthwhile/resource intensive compared to other interventions.
12. What do you feel are the benefits/disadvantages of using an Interest Map?
13. Do you feel you need any additional support/scaffolds or resources relating to absorbing interests? Probe: what would make it easier/more practical for teachers to implement.

Appendix O - Visual Supports

Consent Card

 I am ready to start.

 I want to move on.

 I want to stop now.

 I do not understand.

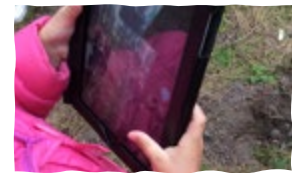
 I need a break.



1. Talking Mat



2. Drawing Task



3. Photo Task



4. Lego



5. Playdough

Appendix P - MIREC Approval

MIREC-5, Created November 2021



MIREC-5

Research Ethics Committee

MIREC Final Decision Form

APPLICATION NUMBER:

A23-052

1. PROJECT TITLE

Taking an Interest - The impact of incorporating Autistic children's absorbing interests in educational activities on their progress towards achieving individual learning targets.

2. APPLICANT

| | |
|------------------------------|----------------------------------|
| Name: | Elle Drohan PGR |
| 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 proposal and I am satisfied it meets MIREC requirements.
Risk assessment and statement are both exemplary.

The application is, therefore, approved.

5. SIGNATURE OF MIREC CHAIR

| | |
|---------------|--|
| Name (Print): | Dr Marie Griffin |
| Signature: |  |
| Date: | 12 th January 2024 |

Appendix Q - Information Sheets and Consent/Assent Forms



Information Sheet for Teachers

Taking an Interest: Exploring the Impact of Using Autistic Children's Absorbing Interests in Educational Interventions.

What is the project about? Absorbing interests, otherwise known as Special Interests, are defined as intense preoccupations and areas of specialist knowledge which function as more than hobbies and often provide a lens through which Autistic individuals view the world. Research indicates that natural curiosity and heightened focus relating to absorbing interests sparks learning opportunities for Autistic children and promotes development of skills that can be generalised across curricular areas and settings. This project aims to explore how Autistic children and their families experience their absorbing interests. It also aims evaluate the impact and feasibility of implementing a strengths-based absorbing interest intervention to support Autistic children's progress towards achieving individual education targets.

Who is undertaking the project? My name is Elle Drohan and I am a Trainee Psychologist on the Doctorate in Educational and Child Psychology (DECPsy) Programme in Mary Immaculate College, Limerick. I previously qualified with a B.Ed in Education and Psychology and I have three years teaching experience. As part of the DECPsy programme, I am undertaking a Doctoral Thesis to explore how Autistic children's absorbing interests can be used to support educational interventions. My research is being conducted under the supervision of Dr. Emer Ring, Dean of Education in MIC and Dr. Lisha O' Sullivan.

Why is the project being undertaken? To enhance meaningful inclusion of Autistic children, development of supports to increase engagement in education are a research priority for the Autism community and educational stakeholders alike. As the first known study of its kind in Ireland, the current research addresses a gap by contributing findings to inform the practice of teachers and supportive adults working with Autistic children. The project aims to use neuro-affirmative approaches which value and include the voice of the Autistic child in research to inform the development of an intervention that can be used to support Autistic student's engagement and learning.

What is involved for participants? Pre-intervention, the researcher will conduct a face-to-face classroom-based session with children participating in the study. Child-friendly data collection methods will be used to gain the children's perspectives and insights into their absorbing interests, including child-led conferencing, play, drawing, artwork and inviting children to take photos of their favourite things. This will take place in the child's classroom, in the presence of their teacher and/or Special Needs Assistant. The child's Autism will not be referenced during this session; the focus will be on gaining an insight into the child's interests and learning style. Using this information, the researcher will liaise with teachers/Special Needs Assistants participating in the study to create an Interest Map which will be implemented as an intervention with the children over a 6-8 week period, to support progress towards learning targets identified in their Student Support Plan (SSP). The role of the teacher in co-creating the Interest Map will involve sharing information relating to the child's SSP and daily learning activities with the researcher. Based on this information, the researcher will formulate the Interest Map and liaise with the teacher via email/MS Teams to plan its use and revise it as necessary. The Interest Map will not be formally analysed as part of the research, rather, it will be used to inform and structure the intervention. Intervention sessions and lessons will be led by the child's teacher as part of the regular curricular experience at school throughout the intervention

period, thus reducing the need for additional resource or time demands. Teachers will be encouraged to integrate the Interest Map in the child's typical daily learning activities as much as possible/feasible within their classroom context over the intervention period. This may include using the Interest Map in whole-class lessons or individual sessions with the child. The researcher will be available throughout the intervention via email to support the teacher in implementing the Interest Map. With parent/guardian consent, teachers will record children's engagement in the intervention using video recordings. The purpose of these recordings is to facilitate teacher reflection on intervention sessions and post-intervention discussions with the researcher, information which will be analysed as part of the research project. The teacher will record a minimum of two sessions per week, with the option to record more sessions if she/he wishes. The teacher will be asked to select a number of 30 second video clips from across the intervention sessions to share and discuss with the researcher through reflective dialogue at the end of the intervention period. Following the intervention period, teachers, SNAs and parents/guardians of children participating will be invited to engage in an individual semi-structured interview, which will last approximately 30 minutes. It will be necessary to voice record the interviews and reflective dialogues to preserve the integrity of the process in relation to accurately representing participants' experiences. Interviews and reflective dialogues can take place face-to-face or using MS Teams to accommodate participants. Following transcription, each participant will be provided with a copy of their interview/dialogue transcript and invited to confirm its accuracy.

Have participants the right to withdraw from the project? Participation in this project is entirely voluntary and participants may withdraw from the project at any time without consequence. Participants also have the right to refuse to answer specific questions during the semi-structured interviews. Children participating in the study also have the right to withdraw from the study at any point during the intervention period. Assent will be an ongoing process. Verbal and non-verbal indicators of their assent and willingness to participate will be observed and respected throughout the research process. The teacher will be briefed before the intervention on maintaining the child's right to withdraw in teacher-facilitated intervention sessions.

How will confidentiality be maintained? Electronic and written information will be kept strictly confidential and will adhere to the legislation governing GDPR. The teacher will adhere to school data protection policies when recording and storing videos of the intervention sessions. At the end of the intervention period, the video files will be transferred to the researcher. All data collected, including the video files, will be stored securely on an MIC Server using Microsoft One Drive which has two levels of password protection and which only the researcher has access to. All data gathered will be anonymised using pseudonyms. Consent forms will be stored securely and separately to the raw data. Raw interview and video recording data will be destroyed completely once it has been transcribed verbatim and analysed.

How will the information be used / disseminated? The anonymised data collected from the semi-structured interviews will be analysed and used to inform the final Doctoral Thesis. Raw interview and video recording data will be destroyed completely once it has been transcribed and analysed. Following completion of the study and in accordance with the Mary Immaculate College (MIC) Data Retention Policy, anonymised data gathered, such as transcripts of the interviews, may be retained indefinitely as required by the researcher and used in any publications or presentations stemming from this project.

Contact details: If at any time you have queries regarding this study you can contact me through email – [REDACTED] *This research study has received Ethics approval from the Mary Immaculate College Research Ethics Committee (reference number: A23-052). If you have any concerns about this study and wish to contact an independent authority, you may contact: Mary Collins, MIREC Administrator, Mary Immaculate College, Limerick. Telephone: 061-204980 E-mail: mirec@mic.ul.ie*

Information Sheet for Parent/Guardians

Taking an Interest: Exploring the Impact of Using Autistic Children's Absorbing Interests in Educational Interventions.



What is the project about? Absorbing interests, also known as Special Interests, are intense interests and areas of specialist knowledge. They are more than hobbies for Autistic individuals and often help them understand the world. Research shows that natural curiosity and increased focus relating to absorbing interests sparks learning opportunities for Autistic children and promotes development of skills that can be used across curricular areas and settings. This project aims to explore how Autistic children and their families experience their absorbing interests. It also aims evaluate the impact and feasibility of a strengths-based absorbing interest intervention to support Autistic children's progress towards achieving their individual education targets.

Who is undertaking the project? My name is Elle Drohan and I am a Trainee Psychologist on the Doctorate in Educational and Child Psychology (DECPsy) Programme in Mary Immaculate College, Limerick. I previously qualified with a B.Ed in Education and Psychology and I have three years teaching experience. As part of the DECPsy programme, I am undertaking a Doctoral Thesis to explore how Autistic children's absorbing interests can be used to support educational interventions. My research is being conducted under the supervision of Dr. Emer Ring, Dean of Education in MIC and Dr. Lisha O' Sullivan.

Why is the project being undertaken? In order to increase meaningful inclusion of Autistic children, development of supports to improve engagement in education are a research priority for the Autism community and educational stakeholders. As the first known study of its kind in Ireland, the current research addresses a gap by contributing findings to inform the practice of teachers and supportive adults working with Autistic children. The project aims to use neuro-affirmative approaches which value and include the voice of the Autistic child in research to inform the development of an intervention that can be used to support Autistic student's engagement and learning.

What is involved for participants? Pre-intervention, the researcher will engage in a face-to-face classroom-based session with the children who are participating in the study. Child-friendly data collection methods will be used to gain the children's perspectives and insights into their absorbing interests, including child-led conferencing, play, drawing, artwork and inviting children to take photos of their favourite things. The session with the children will take place in the child's classroom, in the presence of their class teacher and/or Special Needs Assistant. The child's Autism will not be referenced during this session; the focus will be on gaining information on the child's interests and learning style. Using this information, the researcher will support the teachers/Special Needs Assistants participating in the study to create and implement an Interest Map intervention with the children over a 6-8 week period, to support progress towards learning targets identified in their Individual Education Plan. The Interest Map will not be formally analysed as part of the research but it will be used to inform and structure the intervention. Intervention sessions will be led by the child's teacher and form part of their regular curricular experience at school throughout the intervention period. Teachers will be encouraged to use the Interest Map in the child's typical daily learning activities as much as possible within their classroom context over the intervention period. This may include using the Interest Map in whole-class lessons and/or individual sessions with the child. With parent/guardian consent, teachers will record the children's engagement in the intervention using video recordings. The purpose of these recordings is to support teacher reflection on the intervention

sessions and inform post-intervention discussions with the researcher, which will be analysed as part of the research project. The teacher will be asked to record a minimum of two sessions per week, with the option to record more sessions if she/he wishes. At the end of the intervention period, the teacher will be asked to select a number of 30 second video clips from across the intervention sessions to share and discuss with the researcher through reflective dialogue. Following the intervention period, teachers, SNAs and parents/guardians of children participating in the study will be invited to take part in an individual semi-structured interview, which will last approximately 30 minutes. It will be necessary to voice record the interviews to ensure that the researcher can accurately represent participants' experiences. Interviews can take place face-to-face or using MS Teams to accommodate participants. Following transcription of the interviews, each participant will be provided with a copy of his/her interview transcript and invited to confirm its accuracy.

Have participants the right to withdraw from the project? Participation in this project is entirely voluntary and participants may withdraw from the project at any time without consequence. Participants also have the right to refuse to answer specific questions during the semi-structured interviews. Children participating in the study also have the right to withdraw from the study at any point during the intervention period. Assent will be an ongoing process. Verbal and non-verbal signs of their assent and willingness to participate will be observed and respected throughout the research process. The teacher will be briefed before the intervention on maintaining the child's right to withdraw in teacher-facilitated intervention sessions.

How will confidentiality be maintained? Electronic and written information will be kept strictly confidential and will adhere to GDPR legislation. The teacher will adhere to school data protection policies when recording and storing videos of the intervention sessions. At the end of the intervention period, the video files will be transferred to the researcher. All data collected, including the video files, will be stored securely on an MIC Server using Microsoft One Drive which has two levels of password protection and which only the researcher has access to. All data gathered will be anonymised using false names. Consent forms will be stored securely and separately to all other data. Raw interview and video recording data will be destroyed completely once it has been transcribed and analysed.

How will the information be used / disseminated?

The anonymised data collected from the semi-structured interviews will be analysed and used to inform the final Doctoral Thesis. Raw interview and video recording data will be destroyed completely once it has been transcribed and analysed. Following completion of the study and in accordance with the Mary Immaculate College (MIC) Data Retention Policy, anonymised data gathered, such as transcripts of the interviews, may be retained indefinitely as required by the researcher and used in any publications or presentations stemming from this project.

Contact details: If at any time you have queries regarding this study you can contact me through email –

This research study has received Ethics approval from the Mary Immaculate College Research Ethics Committee (MIREC) (reference number: A23-052). If you have any concerns about this study and wish to contact an independent authority, you may contact: Mary Collins, MIREC Administrator, Mary Immaculate College, Limerick. Telephone: 061-204980 E-mail: mirec@mic.ul.ie

Taking an Interest: Exploring the Impact of Using Autistic Children’s Absorbing Interests in Educational Interventions.



| | |
|-----------------------|--|
| Name | |
| Contact Number | |
| Email | |

I _____ am willing to participate as an interviewee in this research project outlined in the information letter to being conducted by Elle Drohan and supervised by Dr. Emer Ring and Dr. Lisha O’ Sullivan. I also consent for my child _____ to participate in the project.

- I have been given sufficient information about the project and have had time to review this information. I understand the nature of the research and what my participation and my child’s participation will entail.
- I am aware that the parent/guardian interview will be conducted face-to-face or via MS Teams and will be voice recorded. I am satisfied that the data collected during my interview will be anonymised.
- I am aware that intervention sessions with my child will be conducted and recorded by their class teacher to inform post-intervention discussions with the researcher. I am also satisfied that my privacy, and that of my child, will be maintained in accordance with relevant legislative requirements. I am aware that the teacher will adhere to school data protection policies when storing these video files for the duration of the intervention, following which they will be transferred to the researcher and stored securely. The video files and interview recordings will be destroyed completely once they have been transcribed. I am aware that the transcribed discussions and interviews will be analysed as part of the research and anonymised quotes may be included in the final thesis.
- I am satisfied that anonymised data may be used in an anonymous form in any publications /presentations stemming from this project.
- I understand that my participation is voluntary and that I can withdraw from this project at any time or that I may abstain from answering specific questions during my participation in the interviews. I understand that my child’s participation is also voluntary and that verbal and non-verbal indicators of their assent and willingness to participate will be observed and respected throughout the research process.

| | |
|----------------|--|
| Signed: | |
| Date: | |

Consent Form for Teachers

Taking an Interest: Exploring the Impact of Using Autistic Children’s Absorbing Interests in Educational Interventions.



| | |
|-----------------------|--|
| Name | |
| Contact Number | |
| Email | |

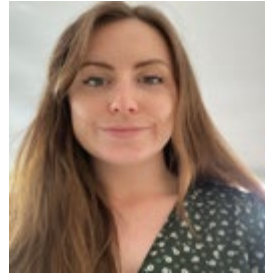
I _____ am willing to participate in this research project outlined in the information letter to being conducted by Elle Drohan and supervised by Dr. Emer Ring and Dr. Lisha O’ Sullivan.

- I have been given sufficient information about the project and have had time to review this information. I understand the nature of the research and what my participation and the child’s participation will entail.
- I am aware that the researcher will support me in co-creating an Interest Map based on data collected on the child’s Absorbing Interest and Individual Education Plan Targets.
- I am aware that I will implement this Interest Map as an intervention with the child as part of their typical curricular activities and classroom-based learning over a 6-8 week period.
- I am aware I will be asked to video-record intervention a minimum of two sessions per week to inform personal reflection and post-intervention discussions with the researcher. I am also satisfied that my privacy, and that of the child, will be maintained in accordance with relevant legislative requirements.
- I agree to adhere to school data protection policies when storing these video files for the duration of the intervention, following which they will be transferred to the researcher and stored securely. The video files and interview recordings will be destroyed completely once they have been transcribed and analysed.
- I agree to participating in a post-intervention interview which will be conducted face-to-face or via MS Teams and will be voice recorded. I am satisfied that the data collected during my interview will be anonymised.
- I am satisfied that anonymised data may be used in an anonymous form in any publications /presentations stemming from this project.
- I understand that my participation is voluntary and that I can withdraw from this project at any time or that I may abstain from answering specific questions during my participation in the interviews. I understand that the child’s participation is also voluntary and that verbal and non-verbal indicators of their assent and willingness to participate will be observed and respected throughout the research process.

| | |
|----------------|--|
| Signed: | |
| Date: | |

Information Sheet and Assent Form for Child Participants

Hello! My name is Elle and I am a psychologist. I work with children to find out how they learn. I want to find out more about what children are interested in. I would like to come to your classroom



What will happen if you agree?

I will visit your classroom. We will play games, draw pictures and talk about things that you like to do. I will share some ideas with your teacher and help them make an Interest map which they will use in lessons with you. Your teacher will video record some of these lessons to



Do you have to take part?

No you do not have to take part. It is your choice. If you do take part but you change your mind at any time that is ok. You can say 'I want to stop' or point to the

































Your parent/guardians and teacher have been given lots more information. You can ask them questions or they can call me to ask questions.

If you would like to take part, you can tell your teacher and they will let me know. I will agree a day that I can come to visit your classroom.

Child Assent Form

Listen to these questions and choose your answer yes or no for each one

1. Do you understand why Elle wants to come to visit your class?
 
 
2. Do you agree to take part in activities with Elle so that she can learn about your favourite things?
 
 
 
3. Do you know that your teacher will video record some of your lessons in class over the next few weeks?
 
 
4. Do you know that if you have any questions about taking part, you can ask Elle, your teacher or your parent/guardians?
 
 
5. Do you know that if you do not want to take part you can say no and you can change your mind at any time?
 
 
6. Do you know that Elle will keep the information that she learns about you safe?
 
 
7. Do you agree that Elle can use the information to find out about how children like to learn?
 
 

If you want to take part, put a mark in the box

Declaration by the researcher

I declare that I have read out the information sheet and assent form in the presence of the child and he/she has had the opportunity to ask questions about the research. I declare that the child has agreed to take part in the research freely and voluntarily and is aware of his/her right to withdraw. A copy of this assent form has been given to the child's parent/guardians.

Signature of Researcher: _____

Signature of Witness: _____

Date: _____

Appendix R - Overview of Coding Process

Overview of the Coding Process

Stage 1 – Familiarisation

Transcript
May 27, 2024, 10:10 AM

ELLEN BROGHAN (Student) started transcription

ELLEN BROGHAN (Student)
So I'll be using the terms absorbing interests, that's the term I'm using in my research, but I'm talking about kind of the special interest in the area of interest in Pokémon when I use that term. So yeah, I suppose to start off I'll just ask you to tell me a little bit about Amelia's* special interest.

Katie 0:25
Yeah, I suppose she got into Pokémon around 2018 or so, prior to that it would have been Paw Patrol. And I suppose younger kids stuff. Umm yeah. Mostly Paw Patrol?
She kind of focuses in on one particular interest.
So since Pokemon came on anyway, it's been a huge interest (laugh).
So she's got a lot of the little figures, and she's always played with figures. She tends to re-enact the scenes from the television, say the little programs that she'd watch on Netflix of Pokémon.

ELLEN BROGHAN (Student) 1:10
OK.

Katie 1:24
She loves...
She kind of goes into her own little world, but I find that relaxes her for some reason. You know, if she's had a bad day at school.

ELLEN BROGHAN (Student) 1:30

Stage 2 - Systematic Data Coding

| Name | Files | References | Created on | Created... | Modified on | Modified by | Color |
|--|-------|------------|---------------------|------------|-----------------------|-------------|-------|
| <input type="radio"/> A coping tool | 8 | 32 | 6 Aug 2024 at 14:27 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> A way in | 5 | 11 | 6 Aug 2024 at 12:33 | ED | 17 Dec 2024 at 15:... | ED | |
| <input type="radio"/> Academic Gains | 10 | 42 | 6 Aug 2024 at 12:25 | ED | 17 Dec 2024 at 20:... | ED | |
| <input checked="" type="radio"/> All-consuming | 9 | 43 | 6 Aug 2024 at 12:12 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Attachment to previous... | 3 | 6 | 6 Aug 2024 at 14:33 | ED | 17 Dec 2024 at 15:19 | ED | |
| <input type="radio"/> Barriers to Inclusion | 4 | 20 | 7 Aug 2024 at 16:37 | ED | 11 Dec 2024 at 23:... | ED | |
| <input type="radio"/> Barriers to Intervention | 5 | 31 | 6 Aug 2024 at 12:35 | ED | 17 Dec 2024 at 15:... | ED | |
| <input type="radio"/> Being the expert | 9 | 28 | 6 Aug 2024 at 14:39 | ED | 17 Dec 2024 at 21:... | ED | |
| <input type="radio"/> Confidence | 7 | 16 | 6 Aug 2024 at 12:27 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Curricular Links | 7 | 22 | 6 Aug 2024 at 12:18 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Emergence of the Inter... | 9 | 19 | 6 Aug 2024 at 14:35 | ED | 6 Jan 2025 at 14:22 | ED | |
| <input type="radio"/> Experience of Autism | 6 | 24 | 6 Aug 2024 at 11:42 | ED | 17 Dec 2024 at 15:15 | ED | |
| <input type="radio"/> Facilitators of Intervent... | 6 | 39 | 6 Aug 2024 at 12:37 | ED | 6 Jan 2025 at 14:22 | ED | |
| <input type="radio"/> Family Supportive | 7 | 21 | 7 Aug 2024 at 16:20 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Impact on Attitude | 6 | 24 | 6 Aug 2024 at 12:24 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Knowing the children | 3 | 7 | 6 Aug 2024 at 11:44 | ED | 17 Dec 2024 at 15:... | ED | |
| <input type="radio"/> Knowledge | 5 | 21 | 6 Aug 2024 at 12:16 | ED | 17 Dec 2024 at 15:... | ED | |
| <input type="radio"/> Need for Accommodat... | 8 | 11 | 6 Aug 2024 at 12:30 | ED | 17 Dec 2024 at 21:... | ED | |
| <input type="radio"/> Need for structure | 7 | 16 | 6 Aug 2024 at 12:13 | ED | 17 Dec 2024 at 16:10 | ED | |
| <input type="radio"/> Negative Impact on En... | 8 | 27 | 6 Aug 2024 at 12:12 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Obvious versus not ob... | 2 | 8 | 6 Aug 2024 at 11:47 | ED | 17 Dec 2024 at 15:18 | ED | |
| <input type="radio"/> Other Activities related... | 12 | 39 | 6 Aug 2024 at 12:17 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Parent or Teacher Ove... | 5 | 17 | 6 Aug 2024 at 14:37 | ED | 11 Dec 2024 at 23:... | ED | |
| <input type="radio"/> Parent-Teacher Attitude | 7 | 30 | 6 Aug 2024 at 12:39 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Part of their Identity | 7 | 14 | 6 Aug 2024 at 11:40 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Positive Impact on Eng... | 10 | 54 | 6 Aug 2024 at 12:12 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Re-enacting scenes | 7 | 11 | 7 Aug 2024 at 16:25 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Repetitive Nature of th... | 3 | 20 | 6 Aug 2024 at 12:15 | ED | 11 Dec 2024 at 22:... | ED | |
| <input type="radio"/> Response of Others | 10 | 32 | 6 Aug 2024 at 12:27 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> Social Interaction | 10 | 61 | 6 Aug 2024 at 12:14 | ED | 18 Dec 2024 at 00:... | ED | |
| <input type="radio"/> The Impact of Age | 5 | 20 | 6 Aug 2024 at 12:55 | ED | 11 Dec 2024 at 23:11 | ED | |
| <input type="radio"/> Understanding of Abs... | 9 | 31 | 6 Aug 2024 at 11:47 | ED | 18 Dec 2024 at 00:... | ED | |

Stage 3 - Generating Initial Themes from Coded and Collated Data

| Affective | Facilitator of Engagement | All-consuming | Experience of Absorbing Interests | Facilitators of Intervention | Social | Barriers to Intervention |
|---|--|--|--|---|---|---|
| <ul style="list-style-type: none"> • A coping tool • Part of their identity • Being the expert • Confidence • Re-enacting scenes • Impact on attitude | <ul style="list-style-type: none"> • A way in • Academic gains • Curricular links • Knowledge • Positive Impact on Engagement • Independence • Motivation | <ul style="list-style-type: none"> • All-consuming • Repetitive nature • Organisation • Negative impact on engagement • Collecting things • Parent-teacher overwhelm | <ul style="list-style-type: none"> • Attachment to previous absorbing interest • Emergence of interest • Individual Differences • Obvious versus not obvious • The impact of age • Understanding of Absorbing Interests • Parent-teacher attitudes • Experience of Autism/attitudes on inclusion | <ul style="list-style-type: none"> • Need for accommodations • Need for structure • Facilitators of Intervention • Knowing the children • Teacher Learning | <ul style="list-style-type: none"> • Social Interaction • Response of others • Family Supportive • Other activities related to the interest | <ul style="list-style-type: none"> • Barriers to inclusion • Barriers to intervention |

Stage 4: Developing and Reviewing Themes; Stage 5: Refining, Defining and Naming Themes

| Codes | Subthemes | Themes |
|--|---|--|
| Social interaction | A social bridge | Pathways to Social Engagement |
| Individual differences | | |
| Obvious versus not obvious | | |
| Impact of age | | |
| Other activities related to the interest | They open new doors and create windows of opportunity | |
| Response of others | Bridging the Gap: A Shared Responsibility | |
| Family Supportive | | |
| All-consuming | All-consuming | A Snapshot into the Autistic Experience of Absorbing Interests |
| Repetitive nature | | |
| Negative impact on engagement | | |
| Parent-teacher overwhelm | | |
| Collecting things | | |
| Part of their identity | Part of who I am | |
| Emergence of the interest | | |

| | | |
|----------------------------------|---|---|
| Attachment to previous interests | | |
| Being the expert | I am an expert | |
| Confidence | | |
| Knowledge | | |
| A coping tool | A coping tool | Light, Safety and Growth in Emotional Wellbeing |
| Re-enacting scenes | | |
| Impact of attitudes | A source of happiness, emotional literacy development | |
| A coping tool | | |
| A way in | A way in | An Asset for Learning |
| Positive impact on engagement | | |
| Curricular links | | |
| Academic gains | | |
| Curricular links | Interest-based learning in practice | |
| Academic gains | | |
| Social Interaction | | |
| Need for structure | Facilitators of the Interest Map | |
| Need for accommodations | | |
| Knowing the children | | |
| Facilitators of the intervention | | |
| Barriers to the intervention | Barriers to the Interest Map | |

Appendix S: Case Study Protocol

| School 1 - Case 1 and 2 | School 2 - Case 3 and 4 |
|--|---|
| Data Collection – Day 1 | Data Collection – Day 5 |
| <ul style="list-style-type: none"> • Observation of children engaging in typical classroom learning activities. • Field notes to document observations. • Conferencing with teacher on classroom routine and sharing of SSPs. | <ul style="list-style-type: none"> • Observation of children engaging in typical classroom learning activities. • Field notes to document observations. • Conferencing with teachers on classroom routine and sharing of SSPs. |
| Data Collection – Day 2 | Data Collection – Day 6 |
| <ul style="list-style-type: none"> • Play-based data collection using Lego and Playdough. • Photo voice. • Child-conferencing using drawing activity and talking mat. | <ul style="list-style-type: none"> • Play-based data collection using Lego and Playdough. • Photo voice. • Child-conferencing using drawing activity and talking mat. |
| Data Collection – Day 3 | Data Collection – Day 7 |
| <ul style="list-style-type: none"> • Semi-structured interview with teacher. • Reflective dialogues with teacher based on video recordings. | <ul style="list-style-type: none"> • Semi-structured interviews with parents. |
| Data Collection – Day 4 | Data Collection – Day 8 |
| <ul style="list-style-type: none"> • Semi-structured interviews with parents. | <ul style="list-style-type: none"> • Semi-structured interview with teachers. • Reflective dialogues with teachers based on video recordings. |

Appendix T: Observation Protocol

Date:

Time:

| Descriptive Notes | Reflective Notes |
|--|-------------------------|
| <p>Prompts:</p> <ul style="list-style-type: none">○ Indicators of child engagement in learning○ Indicators of social engagement○ Pedagogical strategies used by teacher○ Classroom layout and physical setting○ Classroom routine○ Children’s approach to learning activities○ Observed learning strengths○ Observed areas of difficulty | |
| | |

Appendix U: Sample Activities from the Interest Map

Class – 6th Class

Absorbing Interest – Drawing Animations and Puppets

Aligns with the Primary Curriculum Framework for Primary and Special Schools (2023) and Primary Language Curriculum (2019)

Project 1: Narrative Writing

Curricular Areas: Language (Oral language, reading, writing), Arts Education (Drama, Art, Music), Science, Technology, Engineering and Mathematics (STEM) Education.

Key Competencies: Being an active learner, being a digital learner, being a communicator and using language, being creative.

Learning Experiences:

- Create and design a new character – brainstorm and discuss vocabulary and phrases to describe the character’s appearance and characteristics, create visual representations of the character using drawings and art materials.
- Design a comic strip to illustrate a sequence of events experienced by the character. Learn about use of speech and thought bubbles, sequencing and captions.
- Apply the features of narrative writing to compose a short story featuring the character. Learn about plot, setting description and dialogue in context. Engage in the writing process to plan, draft, edit, revise and publish the story (e.g. share orally with peers or on a classroom display).
- Use the story as a stimulus to create an animation using Stop Motion animation software. Create and choose music and sounds to accompany the animation. Present the animation to peers.
- Enact scenes from the story with peers using drama techniques such as still images, role-play, script-writing, puppets and mime.

Project 2: Learning about Types of Puppets

Curricular Areas: Language (Oral language, reading, writing), Arts Education (Drama, Art), Wellbeing, Social and Environmental Education, Science, Technology, Engineering and Mathematics (STEM) Education.

Key Competencies: Being an active learner, being a digital learner, being well, being a communicator and using language, being creative, being an active citizen.

Learning Experiences:

- Learn about how puppets are used in different countries around the world. Engage with various information sources e.g. reading comprehensions, teacher presentations, videos and books.
- Create a factfile or presentation on a puppet tradition of choice. Conduct independent research to inform the factfile using internet sources and books. Extend learning to explore other traditions within this culture. Learn about the history and geography of the country e.g. location, language, food, landmarks, famous events.
- Apply the features of procedural writing to compose a list of steps on how to make a puppet. Engage in the writing process to plan, draft, edit, revise and publish the piece (e.g. share orally with peers or on a classroom display).
- Use the instructions to create a puppet using art materials of choice with peers. Provide opportunities to engage in play with the puppets.
- Use the puppets to teach and practise emotional literacy and emotional regulation techniques e.g. role play resolving conflict/social initiations, deep breathing, communicating feelings etc.
- Learn about the scientific properties of shadows. Read a procedural text to inform the making of a shadow puppet. Conduct an experiment using the shadow puppets. Perform a shadow puppet show for younger classes.