Teachers' Perspectives on Strategies to Support Academic Performance, Behaviour, and Self-Regulation of Pupils with a Diagnosis of ADHD in Irish Mainstream Primary Classrooms

HIBERNIA COLLEGE

Teachers' Perspectives on Strategies to Support Academic Performance, Behaviour, and Self-Regulation of Pupils with a Diagnosis of ADHD in Irish Mainstream Primary Classrooms

Clodagh Carey

Dissertation submitted in partial fulfillment of the award of Professional Master of Education in Primary

June 2024

Abstract

This study investigated teacher strategies for supporting pupils with Attention Deficit Hyperactivity Disorder (ADHD) in Irish mainstream primary classrooms. Adopting an interpretivist paradigm and qualitative methodology, the study involved semi-structured interviews with mainstream primary teachers (n=5). Findings reveal diverse strategies for enhancing academic performance, behaviour management, and self-regulation, with tailored approaches proving the most effective. Significant challenges, including policy gaps, insufficient training, and inadequate support systems, were highlighted. Teachers expressed clear frustration over the lack of ADHD-specific guidance. Recommendations include developing ADHD-specific policies and comprehensive training programs in pre-service and ongoing education to better support pupils with ADHD.

Acknowledgements

I would like to express my sincere gratitude to my research supervisor for her continued professional support and guidance throughout the duration of my dissertation. Additionally, I am deeply appreciative of all the teachers who participated in the semi-structured interviews for this study. Their responses and interactions provided invaluable insights into the area of ADHD support in Irish mainstream primary classrooms.

Table of Contents

List of Abbreviations

Attention Deficit Hyperactivity Disorder	ADHD
Department of Education and Science	DES
American Psychiatric Association	APA
Diagnostic and Statistical Manual	DSM
Edinburgh Psychoeducation Intervention for Children and Young People	EPIC
Special Educational Needs	SEN
National Educational Psychological Service	NEPS
National Council for Special Education	NCSE
Participant	P

1 Chapter One: Introduction

1.1 Introduction

Attention Deficit Hyperactivity Disorder (ADHD) affects approximately 3-5% of school-aged children in Ireland, profoundly influencing their academic performance, behaviour, and self-regulation (Hallahan, 2021; American Psychiatric Association (APA), 2022). Given this prevalence, understanding, and addressing the needs of pupils with ADHD in primary education is crucial. This chapter establishes the groundwork for the research study, tracing its origin from the researcher's teaching experiences. It contextualises the research within existing policies and literature on ADHD in primary education, emphasising the importance of investigating this topic. Finally, the chapter outlines the specific aims of the research and provides a clear structure for the subsequent chapters.

1.2 Origin of the Dissertation

The inception of this research study arose from the researcher's extensive engagement with pupils with ADHD throughout school placements and substitute teaching experiences. Recognising a discernible gap in understanding effective classroom support strategies tailored to these children's needs, the researcher embarked on reflection and discussions with colleagues. Intrigued by the diverse perspectives and approaches employed by teachers to address ADHD and its growing prevalence in primary schools, the researcher developed a study aimed at exploring innovative strategies for enhancing behaviour management, academic attainment, and self-regulation among these children. Ultimately, this research endeavour was driven by the desire to refine the researcher’s own pedagogical practice and contribute meaningfully to the broader discourse surrounding ADHD support within primary education.

1.3 Background to the Project

Situated within the realm of primary education, this study focuses on supporting children with ADHD, highlighting its global prevalence (Polanczyk et al., 2014) and wide-ranging impact on academic, social, and emotional well-being (Classi et al., 2012; Barkley, 2015). While research emphasises the pivotal role of teachers in implementing effective support measures (HADD, 2005), current Irish education policies lack tailored guidance and strategies on ADHD for teachers (Department of Education and Science (DES), 2017). Consequently, this study seeks to explore current practices, identify challenges, and propose

innovative strategies for supporting children with ADHD in classroom settings, thereby enhancing ADHD support within primary education.

1.4 Rationale

Understanding the complexities of supporting children with ADHD in primary education is crucial due to its prevalence and profound impact on their development. Hallahan's (2021) research indicates a prevalence of ADHD among school-aged children in Ireland, characterised by persistent patterns of inattention, hyperactivity, and impulsivity (APA, 2022). These symptoms not only affect academic performance (Arnold et al., 2020) but also influence emotional regulation, behaviour, and social interactions (Carpenter Rich et al., 2009; Vacher et al., 2020). Despite the widespread occurrence of ADHD, educators often feel unequipped to address the diverse needs of these children effectively (Ward, Kovshoff, and Kreppner, 2021). Thus, investigating teachers' strategies and challenges becomes imperative to inform policies and practices aimed at enhancing ADHD support in primary education, ultimately contributing to the creation of more inclusive and supportive learning environments.

The primary aims of this research are:

- To investigate the classroom-based strategies employed by teachers to support the academic performance, behaviour, and self-regulation of pupils with ADHD.
- To examine the challenges associated with supporting pupils with ADHD in primary classrooms.
- To explore strategies and measures that could enhance teachers' capacity to support pupils with ADHD effectively in the classroom.

1.5 Dissertation Layout

This dissertation consists of six chapters. Chapter One, the introduction, establishes the foundation by providing background context, rationale, and study aims. Chapter Two delves into the literature review, examining existing literature on ADHD, classroom-based support strategies and the role of teachers within educational policies. In Chapter Three the methodology and research design are elucidated, detailing the chosen approach, data collection methods, participant sample, and considerations for validity, reliability, and ethics. Chapter Four critically analyses the collected data, organising it thematically. Chapter Five

provides an in-depth interpretation of the findings, comparing them to the literature and offering nuanced perspectives. Finally, Chapter Six concludes the study by summarising the main conclusions and providing actionable recommendations for practice and further research.

1.6 Conclusion

The pervasive and significant impact of ADHD on children's well-being underscores the urgent need for improved support strategies within educational environments. This research aims to explore innovative approaches for enhancing ADHD support in primary classrooms by investigating teachers' strategies, challenges, and the broader discourse surrounding ADHD support. By addressing the existing gap in tailored guidance for teachers within Irish education policies, this study seeks to contribute to the development of more effective support systems. Subsequently, the following chapter will conduct a thorough review of existing research and policies in this domain, further augmenting the groundwork laid here.

2 Chapter Two: Literature Review

2.1 Introduction

This chapter offers a comprehensive literature review on ADHD within primary education. By exploring existing literature, it aims to delve into key themes, including Understanding ADHD, Core Symptoms of ADHD in Children, Classroom-based Strategies for Supporting Pupils with ADHD, and The Role of Teachers in Supporting Pupils with ADHD within Primary Education Policy. Each theme is meticulously examined, with relevant subthemes contextualised within contemporary research. To begin, this chapter discusses the nature of ADHD and presents statistical insights into its diagnosis.

2.2 Understanding ADHD

2.2.1 The Definition and Prevalence of ADHD

According to the APA (2013), ADHD is characterised as a neurobiological condition giving rise to persistent patterns of impulsivity, inattention, and hyperactive behaviour, significantly impacting daily cognitive functioning. Similarly, the ADHD Society in Ireland (HADD, 2018) conceptualises ADHD as a cognitive rather than behavioural disorder, marked by a malfunction in the brain's neurotransmitter chemicals, specifically noradrenaline and dopamine, resulting in a chemical imbalance. Despite common misconceptions portraying ADHD as a mere behavioural problem, extensive research (Thome et al., 2012) supports its legitimacy as a valid medical condition. Recognised by major psychological, medical, and educational organisations, ADHD is acknowledged as a prevalent diagnosis affecting approximately 5% of children worldwide (Polanczyk et al., 2014). However, prevalence estimates vary considerably across the literature (Sayal et al., 2018).

Despite the global prevalence, there is a notable scarcity of Irish research, making it challenging to ascertain the exact percentage in Ireland. Nonetheless, sources have reported that around 3-5% of school-aged children in Ireland have received a diagnosis of ADHD (HADD, 2005; Hallahan, 2021). It is essential to highlight a gender disparity, as boys are three to four times more likely to be diagnosed with ADHD than girls (HADD, 2005). This difference is often attributed to variations in symptom presentation, with girls typically exhibiting fewer externalising symptoms such as hyperactivity (De Schipper et al., 2015). However, Murray et al., (2019) argue that symptomatology differs across genders, with many girls not displaying symptoms until around the age of eight. This divergence poses challenges

for diagnostic criteria, which typically require the presentation of symptoms before the age of twelve (APA, 2022).

2.2.2 Causes of ADHD

The aetiology of ADHD is complex, involving both genetic and environmental factors. Studies have highlighted a heightened risk of ADHD in children with a familial history (Starck, Grunwald, and Schlarb, 2016; Miller et al., 2019). Farone and Larsson's (2019) twin study further accentuates the role of genetics, revealing higher concordance rates for ADHD in identical twins compared to non-identical pairs. Collectively, these studies suggest a substantial genetic influence, estimating heritability rates between 75-80% (ibid).

In addition to genetic predispositions, the Center for Disease Control and Prevention (2022) identifies environmental factors such as premature births, low birth weight, prenatal exposure to substances and postnatal exposure to toxins as potential contributors. However, the strength of these associations requires further research for conclusive insights. Additionally, factors like excessive sugar intake, poverty, and family conflict, while popularly speculated as causes, are refuted by existing research (CHADD, 2017). Instead, these factors are acknowledged to potentially exacerbate symptoms in specific children. This nuanced understanding underscores the importance of considering both genetic and environmental dimensions in comprehending the multifaceted origins and manifestations of ADHD.

2.2.3 The Impact of ADHD Across the Lifespan

Research indicates the profound and enduring impact of ADHD on children's behaviour and learning, affecting various aspects of their lives. Cognitive challenges associated with ADHD are linked to adverse effects on pupil’s academic performance and achievement throughout their school years (Classi et al., 2012; Arnold et al., 2020). Barkley (2015) further reveals the pervasive social consequences, revealing that approximately 50% of children with ADHD experience social rejection from their peers. This perspective is reinforced by Law, Sinclair, and Fraser's (2007) exploration, where children commonly used descriptors such as ‘crazy,’ ‘stupid,’ ‘lazy,’ or ‘careless’ to characterise a peer with ADHD. Mueller et al., (2012) highlight the cascading effects of these negative perceptions, emphasising their potential to impact the well-being of children with ADHD, and contribute to self-stigmatisation.

Furthermore, ADHD is reported to persist into adulthood in approximately 70% of cases (Brown, 2013; Caye et al., 2016). Longitudinal studies indicate lower educational and occupational attainment among adults with a history of childhood ADHD compared to their

counterparts (Kuriyan et al., 2013). Despite the potentially lasting repercussions, HADD (2018) emphasises that ADHD is a manageable condition, asserting that with appropriate identification and support, its influence can be significantly mitigated. However, to develop and provide effective interventions and support strategies, it is essential to understand the core symptoms faced by individuals with ADHD.

2.3 Core Symptoms of ADHD in Children

The criteria outlined in the Diagnostic and Statistical Manual (DSM) (APA, 2022) categorise ADHD into three types: Predominantly Inattentive, Predominantly Hyperactive-Impulsive, and Combined type. Although individual presentations of ADHD vary, the following section will delve into the core symptoms and their accompanying characteristics, as outlined by existing literature. These encompass inattentiveness, impulsiveness, and hyperactivity.

2.3.1 Inattentiveness

Inattentiveness, as defined by the DSM (APA, 2022), involves persistent difficulty in sustaining attention during conversations, tasks, or play activities. Children with ADHD often shift between tasks rapidly and are easily distracted from extraneous stimuli. Challenges in listening to and following instructions, coupled with a lack of attention to detail resulting in careless mistakes, are prevalent (ibid). Organisational difficulties, incomplete task execution, and short-term memory issues, such as losing necessary materials and forgetfulness in daily activities, are also documented (HADD, 2005). Though, ADHD Ireland (2022) highlights the selectivity of inattention, noting that a child may be significantly inattentive towards schoolwork but fully focused while engaging in digital games.

2.3.2 Impulsiveness

Impulsiveness, as indicated by HADD (2005), manifests both physically and verbally. Children with ADHD often blurt out answers before questions are completed and struggle to await their turn. This impulsivity extends to interruptions in both classroom activities and interactions with others, often leading to repetitive mistakes due to a lack of consideration for consequences (ADHD Ireland, 2022). While the actions may lack malice, HADD (2005) notes that impulsive behaviours can be misinterpreted as aggressive.

2.3.3 Hyperactivity

Hyperactivity is characterised by constant movement, excessive talking, and an inability to sit still, particularly in a classroom setting (APA, 2022). Children with ADHD may fidget with their hands, feet, or surrounding materials, demonstrating restlessness during activities and

difficulty remaining quiet when required (ADHD Ireland, 2022). According to Farone, Biederman, and Mick (2006), hyperactivity may decrease with age, while inattentiveness remains the most persistent symptom in adults.

2.3.4 Additional Associated Behaviours

Beyond the core symptoms, children with ADHD often exhibit associated behaviours such as reduced cognitive functioning and difficulties in working memory and information recall (Rhodes et al., 2012; Coghill, Seth, and Matthews, 2014). Emotional dysregulation, including low frustration tolerance and difficulty in managing appropriate emotions, is frequently observed, particularly in those with a predominantly hyperactive-impulsive type (Semrud-Clikeman et al., 2010; Vacher et al., 2020). Social difficulties arise from misinterpreting social cues and displaying inappropriate behaviour in various situations (Carpenter Rich et al., 2009). Additionally, poor motor coordination, challenges in gross and fine motor control, and difficulties in tasks such as handwriting are prevalent (Egland, Ueland, and Johansen, 2012; Mokobane, Pillay and Meyer, 2019).

Furthermore, co-existing conditions are common, with 66% of children with ADHD experiencing at least one other condition. These conditions include autism spectrum disorder, anxiety, depression, oppositional defiant and conduct disorders, Tourette syndrome, and learning difficulties (Reale et al., 2017; Melegari et al., 2018). These multifaceted aspects highlight the complexity of ADHD and underscore the necessity for a thorough understanding to develop effective intervention and support strategies.

2.4 Classroom-Based Strategies for Supporting Pupils with ADHD

The high prevalence of ADHD in primary education highlights the importance of developing effective classroom strategies for pupils dealing with ADHD-related challenges. This section explores key strategies within academic instruction, classroom structure, resources and activities, and behaviour management, as identified in the existing literature.

2.4.1 Academic Instruction

Children with ADHD often experience challenges related to impaired working memory, affecting their ability to follow instructions and retain information. Scholars have suggested various academic instructional strategies to address these cognitive difficulties. Barkley (2016) recommends providing step-by-step instructions and encouraging paraphrasing to reduce pupil's cognitive workload and improve their academic performance. Similarly,

McDougal et al., (2022) suggest that breaking down activities can reduce off task behaviour and enhance learning processing capabilities for pupils with ADHD.

A multi-sensory approach, integrating visual aids, manipulatives, and mnemonic devices, as advocated by HADD (2005), has been found to enhance task engagement and memory retention for pupils with ADHD (Woolfolk, Hughes, and Walkup, 2012). Computer-assisted instruction in subjects like mathematics and reading has also proven effective in increasing on-task behaviour and improving academic performance (Clarfield and Stoner, 2005; Mautone, DuPaul and Jitendra, 2005). Additionally, teaching methodologies emphasising repeated instruction, frequent feedback, allowance of extra time, and prioritisation of productivity over accuracy are identified as beneficial for supporting both the behavioural and academic performance of pupils with ADHD (Barkley, 2016; Creelman, 2021).

2.4.2 Classroom Structure, Resources and Activities

Research has shown that implementing a visual classroom schedule, outlining lessons and activities, provides predictability, security and enhances efficiency and daily functioning, particularly regarding behaviour for pupils with ADHD (Barkley, 2015; ADHD Ireland, 2019). Strategic seating placement, such as near the teacher's desk, away from distracting stimuli and among supportive peers, has been shown to significantly promote attentiveness and positive behaviour among pupils with ADHD (Reiber and Mclaughlin, 2004).

Regular movement breaks are crucial for fostering pupil’s concentration, self-regulation, and motor skills, as highlighted by Edinburgh Psychoeducation Intervention for Children and Young People (EPIC) (2017) and HADD (2005). Additionally, providing sensory resources like fidget cushions, stress balls, or ear defenders have been found to improve task engagement and minimise excessive movement during class, as evidenced by McDougal et al., (2022).

Furthermore, cooperative learning activities can increase on-task behaviour and reduce fidgeting among pupils with ADHD, contributing to an overall improvement in their academic performance (Du Paul, 2011; Piffner, 2011; McDougal et al., 2022). Vygotsky's (1978) research supports this view, emphasising the benefits of peer participation in enhancing the learning experience. These findings underscore the need for a multifaceted teaching approach to address the diverse needs of pupils with ADHD in the classroom.

2.4.3 Behaviour Management

Positive reinforcement, particularly through praise and reward systems, is a widely recognised strategy for cultivating desired behaviour in pupils with ADHD. Research indicates that the implementation of specific and immediate praise, as well as token reinforcement systems where pupils receive tokens for targeted behaviour, has a positive impact on concentration skills and academic engagement (Evans, Owens, and Bunford, 2014; Scheuermann, Hall and Billingsley, 2021). Additional studies have corroborated these findings, reporting that reward systems effectively reduce hyperactivity, inattentiveness, and disruptive behaviour while promoting compliance in pupils with ADHD (Harlacher, Roberts, and Merrell, 2006; Barkley, 2016). However, the success of these strategies depends on factors such as frequency, alignment with children's interests, and regular modifications (Du Paul, 2011).

Additionally, resources that facilitate self-regulation, such as Likert scales, timers, and clear communication of classroom rules, are identified as effective tools for enhancing self-regulation, attention, and positive behaviour among pupils with ADHD (Harlacher, Roberts, and Merrell, 2006; Du Paul, 2011; Grosser, 2015; Barkley, 2016).

2.5 The Role of Teachers in Supporting Pupils with ADHD within Primary Education Policy

The DES categorises ADHD under 'emotional disturbance and/or behavioural problems' within the special educational needs (SEN) framework (Department of Education, 2002, p.5). Despite the absence of specific policies addressing teachers' roles in ADHD support, teachers are expected to follow the ‘Guidelines for Primary Schools: Pupils with Special Educational Needs in Mainstream Schools’ (DES, 2017) when accommodating pupils with ADHD. These guidelines delineate the teacher's role in providing a continuum of support through three levels: Classroom Support, School Support, and School Support Plus, depending on the pupil’s needs (ibid). This theme offers an overview of the teacher's role in delivering classroom support, as outlined in these guidelines.

The DES (2017) outlines various aspects concerning the class teacher’s role in supporting pupils with SEN. Initially, it highlights the imperative for all mainstream teachers to employ teaching and learning approaches that address diverse needs and foster the inclusion of all SEN pupils (ibid). Teachers are expected to implement methodologies such as cooperative learning, problem-solving activities, group work, scaffolded instruction and information and

communications technology when teaching SEN pupils (ibid). Furthermore, the policy acknowledges the significance of teachers planning and facilitating differentiation in their lessons. It stipulates that teachers should diversify the structure, presentation, and pace of lessons to meet individual needs, align tasks with pupil's abilities, and tailor lessons to cater to their interests (ibid).

Furthermore, these guidelines highlight the vital role of teachers in seeking support and guidance from external agencies, such as the National Educational Psychological Service (NEPS) and The National Council for Special Education (NCSE), and engaging in Continuing Professional Development regularly to enhance the quality of provision for pupils with SEN. Although not ADHD-specific, these guidelines (DES, 2017) currently constitute the primary policy outlining the role of teachers in supporting pupils with ADHD in primary education.

Finally, the researcher initially planned to explore the challenges of supporting pupils with ADHD in primary classrooms. Two relevant studies (Martinussen, Tannock, and Chaban, 2011; Ward, Kovshoff, and Kreppner, 2021) emphasised a common theme, highlighting significant obstacles faced by teachers due to a lack of confidence, knowledge, and training specific to ADHD. This necessity for specialised training is further underscored by DuPaul and Stoner (2014), who argue that teachers require targeted training to effectively implement interventions tailored to support ADHD related needs such as inattention and hyperactivity. However, there is a lack of comparable research on the challenges encountered in supporting pupils with ADHD hence, this will be investigated as a topic during the research phase.

2.6 Conclusion

This chapter has provided an in-depth exploration of literature related to ADHD. The delineation of ADHD's nature, prevalence, and causes, supported by a synthesis of major studies, lays the foundation for a nuanced understanding. Noteworthy gender differences in diagnosis and the intricate interplay of genetic and environmental factors underscore the complexity of ADHD's origins. The enduring impact of ADHD on children's learning and behaviour is acknowledged, emphasising the need for tailored interventions. Delving into the core symptoms of ADHD, the chapter offers an overview, extending to associated behaviours and co-existing conditions, portraying the multifaceted nature of the disorder.

Classroom-based strategies emerge as crucial, with academic instruction, classroom structure, resources, activities, and behaviour management elucidated as essential components for

supporting pupils with ADHD. The examination of the role of teachers within the existing policy framework contributes to a holistic understanding of the current ADHD support in primary education policy. Overall, the literature explored has raised the following questions:

1. What strategies do teachers currently employ to support the academic performance, behaviour, and self-regulation of pupils with ADHD?
2. What challenges if any, do teachers face when supporting pupils with ADHD in mainstream primary classrooms?
3. What strategies and measures could be implemented to enhance teachers' capacity to effectively support pupils with ADHD in the classroom?

Building on this review, the next chapter will detail the methodology employed to address the questions raised.

3 Chapter Three: Methodology

3.1 Introduction

This chapter delineates the methodology employed to investigate teachers' perspectives on strategies aimed at enhancing the academic performance, behaviour, and self-regulation of pupils with ADHD in primary classrooms. It offers a detailed overview of the chosen research paradigm and qualitative approach, elucidating the rationale behind the selection of data collection methods and analytical techniques. Additionally, the chapter provides insights into participant details, sampling procedures, ethical considerations, and measures taken to ensure the study's validity and reliability. Furthermore, it critically examines the limitations inherent in the study's design.

3.2 Research Paradigm

Mackenzie and Knipe (2006) assert that the term 'paradigm' encapsulates a researcher's fundamental worldview, representing a collection of perspectives or beliefs that guide research endeavours. Within the realm of educational research, diverse paradigms exist, each influencing the researcher's approach. The positivist paradigm, characterised by an objective and external conceptualisation of reality, aims to investigate, validate, and predict behavioural patterns (Taylor and Medina, 2013). This paradigm requires researchers to maintain detachment from the research process itself (Creswell, 2012; Taylor and Medina, 2013). Fadhel (2002) argues that the positivist paradigm is particularly suited for studies seeking to elucidate observations in quantifiable and statistical terms.

Conversely, the interpretivist paradigm posits that reality is socially constructed, subjective, and contingent upon individual experiences (Alharahsheh and Pius, 2020). It emphasises cultivating a deep understanding of human experiences to derive meaning, necessitating the active involvement of the researcher in the research process (ibid). In this study, an interpretivist paradigm was embraced due to its alignment with the overarching goal of comprehending teachers' perspectives on strategies to support pupils with ADHD in primary classrooms. This orientation prioritised individual experiences over broad generalisations, thus informing the study's methodological approach.

3.3 Research Design

Adhering to the interpretivist paradigm, the researcher intentionally opted for a qualitative methodology due to its inherent strengths in capturing nuanced, context-specific insights. The philosophical underpinnings articulated by Flick (2014) and Merriam and Tisdell (2016) emphasise the necessity for a qualitative approach when aiming to gain an understanding of individuals' interpretations within their lived experiences and environments. Unlike quantitative methods, which often reduce phenomena to statistical averages (Creswell, 2017), qualitative methodology closely aligns with the study's objectives. By delving into the intricate layers of participants' perspectives on strategies to support pupils with ADHD, the qualitative approach allowed for an in-depth exploration of the subject matter, providing insights that are challenging to derive solely through quantitative means (ibid).

While qualitative research enriches participants' exploration, it is essential to acknowledge its limitations, including potential subjectivity and limited generalisability; however, these are mitigated by rich, context-specific insights (Creswell and Poth, 2018). This approach, as outlined by Creswell (2017), places the responsibility on the researcher for data collection and interpretation, focusing on elucidating patterns, themes, and consistencies inherent in the sample (Cohen, Mannion, and Morrison, 2018). In this study, the exploration of teachers' perspectives on strategies to support pupils with ADHD involved employing methodological approaches such as conversation analysis, ethnography, and social inquiry. These approaches were instrumental in providing a rich and multifaceted understanding of the subject matter, acknowledging the complexity of human experiences within the educational context.

Moreover, the qualitative methodology facilitated a nuanced examination of the social context, allowing for a deeper exploration of the dynamic interactions between teachers, pupils, and the learning environment. This depth of understanding is often challenging to achieve through quantitative research, which may overlook the subtleties and intricacies inherent in educational settings (Denzin and Lincoln, 2018). By incorporating individual voices from research participants, practicing reflexivity, and adhering to Creswell's (2017) emphasis on providing a detailed description and interpretation of the problem, the qualitative approach ensured a holistic exploration and understanding of teachers' perceptions. This not only contributes to the existing literature but also advocates for meaningful changes in educational practices, offering a more human-centric and contextually relevant perspective that goes beyond mere numerical representation. The choice of qualitative methodology, therefore, emerges as methodologically fitting, aligning with the study's main aim of

capturing the diverse strategies employed by teachers to support pupils with ADHD in Irish primary classrooms.

3.4 Data Collection

The data collection process began with the initiation of written correspondence to school principals (See Appendix 1), providing an overview of the research project and formally requesting permission to involve teachers in their schools. Subsequently, potential participants received information letters (See Appendix 2) outlining the research's purpose and procedures, accompanied by consent forms (See Appendix 3) to ensure voluntary and informed participation.

In line with qualitative methodology, the researcher selected five short (approximately 20-30 mins) audio-recorded interviews as the primary data collection method for this study. These interviews adhered to a semi-structured approach, characterised by a loose format and open-ended questions related to the research topic (Patton, 2014), meticulously planned following key steps. Guidance from Creswell and Poth (2018) and Denzin and Lincoln (2018) informed the thorough examination of the literature review, articulation of research objectives, and identification of crucial aspects of participants' perceptions essential for addressing research questions. Pilot interviews, recommended by Harding (2013), were then conducted to assess the clarity and effectiveness of the interview questions before formal data collection.

The intentional choice of semi-structured interviews over alternatives, especially focus groups, stems from the study's aim to capture a range of individual perspectives, experiences, and narratives from teachers regarding strategies to support pupils with ADHD. This decision diverges from the potential influence of group dynamics or consensus prevalent in focus groups (Blaxter, Hughes and Tight, 2010). In contrast to focus groups, where participant interactions might shape responses, semi-structured interviews serve to mitigate the impact of group dynamics, preventing conformity and the potential dominance of specific voices, fostering a more authentic expression of each participant's unique perspective (Scott and Morrison, 2006). Semi-structured interviews excel in flexibility, enabling researchers to tailor questions to individual responses, explore emerging themes, and probe specific areas for thorough data collection (Hancock, Windridge and Ockleford, 2009; Cohen, Mannion and Morrison, 2018). This adaptability is a key strength, allowing for in-depth exploration, challenging in the more structured and time-limited context of focus group discussions.

Furthermore, the one-to-one interview setting can contribute to a more comfortable and open atmosphere, enhancing the depth of participant responses (Hatch, 2002). The direct interaction in these interviews, incorporating elements such as tone of voice, facial expressions, and body language, as emphasised by Bell (2010), provides researchers with a richer insight into participants' perceptions. This depth of understanding surpasses what can be gleaned from written responses or the structured format of focus group discussions. In summary, the intentional selection of semi-structured interviews, driven by their adaptability, individual focus, and immersive interaction, is justified for its capacity to yield contextually embedded insights into the researched phenomenon.

3.5 Sampling

This study utilised five semi-structured interviews with five current mainstream primary teachers in rural school settings who have experience working with pupils with ADHD. The researcher employed a non-probability sampling technique, specifically purposive sampling, a method extensively utilised in qualitative studies (Creswell, 2017). Within the purview of purposive sampling, researchers intentionally select participants who exhibit a profound and comprehensive understanding of the subject matter (Cohen, Morrison and Manion, 2018). In contrast to probability sampling techniques, which rely on random selection for representativeness and carry the risk of an inadequately informed sample, purposive sampling ensures that interviewees possess the requisite knowledge and expertise essential for addressing the fundamental research question (Robinson, 2014). Therefore, given the small-scale nature of this study and its principal aim of obtaining profound insights from individuals with relevant expertise, the adoption of purposive sampling was considered the most pragmatic and efficient approach.

3.6 Data Analysis

Thematic analysis was adopted to analyse the data derived from the five semi-structured interviews. As articulated by Braun and Clarke (2006), thematic analysis involves the identification, analysis, and reporting of prevalent patterns or themes within a dataset. Adhering closely to Braun and Clarke's (2006) phases of thematic analysis (see Appendix 6), the researcher initiated the process by immersing themselves in the data through attentive listening and verbatim transcription of the audio-recorded interviews.

Subsequently, an open coding method (see Appendix 7) was employed to rigorously interrogate the collected information. This phase involved the researcher drawing upon the

literature reviewed to identify and refine a comprehensive set of themes recurring frequently across the dataset. The subsequent refinement of codes and themes facilitated a thorough examination of their recurrence within the dataset, culminating in the establishment of findings (see Appendix 7).

The iterative nature of thematic analysis, as guided by Braun and Clarke (2006), allowed for a nuanced exploration of various perspectives, ensuring that the emergent themes captured the depth and complexity inherent in the participants' narratives.

3.7 Validity and Reliability

Validity, concerning the credibility of findings, and reliability, focusing on information trustworthiness (Golafshani, 2003; Creswell and Miller, 2010), are pivotal for study quality. The researcher strengthened both aspects in this study by addressing three core concepts: triangulation, bias, and reflexivity.

3.7.1 Triangulation

Triangulation significantly enhanced the research's validity in the five interviews. It involves collecting and analysing data from multiple individuals, providing a more holistic perspective on the explored topic (Lacey and Luff, 2007). As emphasised by Golafshani (2003) and Jonsen and Jehn (2009), triangulation is a potent method for ensuring both validity and reliability in a study. Thus, by delving into the intricacies of the data and considering various viewpoints, this triangulation not only supported but also strengthened the research findings.

3.7.2 Bias

In contrast to a quantitative paradigm emphasising statistical data, this qualitative study focused on capturing teachers' perspectives on supporting pupils with ADHD. Acknowledging the potential impact of personal beliefs and biases on study reliability, the researcher, therefore, implemented strategies to ensure validity.

Given the subjective nature of interviews and the inherent bias risk (Flick, 2014), meticulous preparation was crucial for formulating unbiased and open-ended questions. Referring to Ulrich’s (1999) guidelines for evaluating interview questions, the researcher ensured the questions were carefully crafted. Additionally, as recommended by Harding (2013) and McGrath, Palmgren, and Liljedahl (2019), the interview questions underwent a pilot phase with the researcher's supervisor and a critical friend (see Appendix 4: Initial Interview Schedule, Appendix 5: Amended). This process not only confirmed the absence of leading or

harmful questions but also identified areas requiring modification for enhanced clarity and understanding among all participants.

3.7.3 Reflexivity

Reflexivity involves recognising the researcher's role in co-constructing and interpreting study findings (Flick, 2014). Given the researcher's extensive review of literature and policies regarding the support of pupils with ADHD in primary classrooms, alongside a personal interest in the topic, acknowledging potential biases was crucial. The researcher openly acknowledges how their background and interests may influence the interpretation of collected data. To mitigate biases, a reflective diary was employed to record assumptions (see Appendix 9), with regular reviews by a critical friend to ensure objectivity. These strategies align with Cohen, Manion, and Morrison's (2018, p.225) notion of a 'highly reflexive researcher' deeply aware of how personal perceptions and background may influence the study. Overall, engaging in reflexivity contributed to the enhanced validity and reliability of this study (Hancock, Windridge and Ockleford, 2009).

3.8 Limitations

The small sample size (n=5) poses a notable limitation, restricting the generalisability of findings to a broader population, as insights are specific to the characteristics and experiences of the limited sample (Cohen, Manion, and Morrison, 2018). Additionally, the qualitative approach introduces inherent limitations, with the researcher's personal interest in the area under exploration potentially introducing bias, as complete detachment from qualitative studies is acknowledged to be challenging (Waheed, Kiazai, and Bahadur, 2020). Personal inclinations may influence data interpretation and the framing of findings, emphasising the need for reflexivity, as highlighted by the researcher's use of a reflective diary. Lastly, a significant limitation of qualitative research methods lies in the substantial dependence on the 'individual skills of the researcher' (Anderson, 2010, p.3). Given the researcher's status as a second-time interviewer, this reliance on individual skills introduces the possibility of bias in the results obtained from the semi-structured interviews.

3.9 Ethical Considerations

Ethics plays a pivotal role in qualitative research, with the responsibility for ensuring ethical conduct resting on the researcher (Waheed, Kiazai, and Bahadur, 2020). To initiate this study ethically, the researcher obtained approval from Hibernia College's Ethics Committee and consistently adhered to the principles outlined in the Ethical Guidelines for Educational

Research (BERA, 2018). Key considerations included providing participants with an information letter (see Appendix 2), explicating the purpose of their input, and outlining potential use and dissemination of study outcomes. Participants were informed of their voluntary participation rights, including the right to withdraw without duress or coercion up to one month prior to submission. Additionally, written informed consent was obtained from all participants (see Appendix 3). To safeguard confidentiality and anonymity, pseudonyms were employed during the analysis and presentation of findings.

Furthermore, in compliance with the Data Protection Act (2018) and the General Data Protection Regulation (GDPR) guidelines (2018), all data acquired during the research process was securely stored on a password-protected laptop and safeguarded with encryption software. The data will remain stored for three years, after which it will be safely and securely destroyed in line with GDPR guidelines (2018). Participants were also informed of their right to access any personal data stored relating to them. These ethical measures were integral to conducting the study appropriately, contributing to enhanced reliability and validity of the research (Merriam and Tisdell, 2016).

3.10 Conclusion

This chapter detailed the methodology employed to investigate teachers' perspectives on supporting pupils with ADHD in primary classrooms. Adopting an interpretivist paradigm and qualitative methodology, the research prioritised depth over generalisations. Thematic analysis of semi-structured interviews provided a nuanced exploration of individual experiences. Purposive sampling ensured participants' expertise, while ethical considerations were rigorously addressed. The researcher employed triangulation, bias reduction, and reflexivity to enhance validity and reliability. Despite acknowledged limitations, such as a small sample size, these methodological and ethical choices contribute to the study's reliability and validity, ensuring a comprehensive understanding of the researched phenomenon within ethical parameters. The following chapter will explore the research findings derived from these robust methodological underpinnings.

4 Chapter Four: Findings

4.1 Introduction

This chapter presents the findings from the semi-structured interviews conducted with five teachers (See Appendix 10), exploring their strategies for supporting children with ADHD in the classroom. Throughout this study, the researcher was mindful of ethical considerations to ensure the participants' anonymity. Therefore, the participants are acknowledged as Participant 1 (P1), Participant 2 (P2), Participant 3 (P3), Participant 4 (P4) and Participant 5 (P5). The data was analysed using thematic analysis, which revealed four core themes: Integrated Approaches to Academic Support, Effective Strategies for Managing ADHD Behaviour, Supporting Self-Regulation in Pupils with ADHD, and Challenges and Support Needs in ADHD Management. Each theme is analysed in detail below, with quotations from the interviews to support the identification of these themes, offering insights into teachers' strategies to address ADHD-related needs.

4.2 Integrated Approaches to Academic Support

Throughout the interviews, participants unanimously agreed that providing clear and structured instructions is a highly effective strategy for supporting children's academic performance. Most participants advocated for a step-by-step approach, often accompanied by visual aids. P1 stressed the need for simplifying instructions, explaining, ‘I give one step at a time because they are not able to follow multi-step instructions.’ This sentiment was echoed by P2 and P5, who emphasised the value of explicit instruction to scaffold children’s academic engagement. P2 mentioned, ‘breaking down tasks into steps, makes it easier for them to follow and understand’ while P5 highlighted the effectiveness of step-by-step instructions and visual aids ‘to maintain concentration and enhance academic engagement.’ Additionally, P4 noted the effectiveness of repeated instruction and recall techniques: ‘I repeat instructions three times and then ask them to repeat it back to me…it helps a lot.’ While focused on repetition, this approach aligns with the overarching theme of integrated instructional methods emphasised by the other participants.

Differentiating task duration emerged as another support strategy for pupils with ADHD, although opinions on its effectiveness varied. P2 endorsed the provision of extra time, citing it accommodates ADHD-related difficulties in task completion, ‘extra time allows them to

demonstrate their academic potential at their own pace, especially given their challenges with focus.' However, P1 emphasised that attentional capacity, rather than extended time allowances, dictates task completion, 'giving them extra time does not really work... they will shut down after those five minutes anyway.' Similarly, P5 doubted the efficacy of extra time, preferring workload reduction due to concerns about its impact on pupils' focus and productivity: 'instead I would minimise the workload... giving them extra time does not seem to improve their ability to work but rather leads to reduced lack of focus.' Conversely, P3 suggested a nuanced approach, combining shorter tasks with optional extra time if needed, reflecting flexibility tailored to individual pupils' needs.

Furthermore, participants highlighted the value of employing multi-sensory and individualised support to foster the academic performance of pupils with ADHD. P1 emphasised the effectiveness of proximity and additional support, stating, 'if an adult is near them and prompts them regularly, it does help more.' They further emphasised the value of hands-on activities, such as using play dough and playful methodologies tailored to each child's interests. Similarly, P3 discussed the advantages of integrating visual and concrete resources into lessons to meet the hyperactive needs of ADHD, noting 'they really help because they aid the children's desire to move and manipulate objects.' Additionally, while most participants emphasised the effectiveness of one-to-one support from an adult, P2 highlighted the potential benefits of peer tutoring and collaborative learning, stating, 'I often pair pupils with ADHD with more able students...but it depends on the child; sometimes they work better individually.' These findings show the importance of varied and personalised academic support strategies among participants for pupils with ADHD.

4.3 Effective strategies for Managing ADHD Behaviour

Positive reinforcement emerged as a fundamental effective strategy advocated by participants for managing the behaviour of pupils with ADHD in classroom settings. Each participant preferred individualised reward systems over group approaches, emphasising their significance in cultivating desired behaviours and fostering intrinsic motivation. P1 suggested that tangible reward systems provide immediate feedback and serve as visual reminders, enhancing pupil engagement and motivation. 'The fuzzy wuzzy jar is on his table, so he can see, I need one more to get a reward,' explained P1. Similarly, P2 and P5 echoed the efficacy of individualised reward systems but stressed the importance of tailoring them to pupils' interests. P2 remarked, 'I made a Minecraft-themed reward system because they are interested in that.'

Additionally, participants highlighted the significance of verbal praise in fostering positive behaviour among pupils with ADHD. P3 emphasised that regular praise promotes pupils' self-esteem and confidence, stating, ‘the children with ADHD in my class have poor self-confidence, so regular praise is vital.’ While P2 explained, ‘extra praise keeps them motivated, but you need to be specific, not just “good job”.’

Throughout the interviews, participants collectively emphasised the effectiveness of movement breaks in supporting the behaviour of pupils with ADHD. They highlighted regular whole-class movement breaks, such as ‘Go Noodle videos’, as effective only in reducing disruptive behaviour. However, some participants noted the necessity of additional individualised breaks. For instance, P4 acknowledged the effectiveness of whole-class movement breaks but asserted, ‘these children often require additional breaks throughout the day.’ Despite recognising the benefits of individualised breaks, participants expressed frustration with the lack of additional support, which often renders such breaks unfeasible. P2 lamented the absence of Special Needs Assistants (SNAs), resulting in providing individual movement breaks by ‘getting those children to do a job for me.’ Similarly, P1 and P5 emphasised using classroom jobs and active lessons to facilitate individual movement breaks without the need for additional assistance.

Notably, although not initially discussed, four out of five participants explicitly referenced seating arrangements when asked about additional methods they employ. Their approaches varied, reflecting nuanced considerations tailored to individual classroom dynamics. P1 advocated for strategic placement, positioning the ADHD pupil at the end of a table to minimise distractions and maintain focus for the rest of the class. Similarly, P4 and P5 emphasised meticulous planning to ensure ADHD pupils are not exposed to potential distractions. P4 expressed, ‘somewhere free from distractions, near my desk and away from the door is what works best.’ In contrast, P2 emphasised the social aspect, suggesting placing ADHD pupils alongside motivating peers. Despite these varied approaches, most participants recognised the significance of seating arrangements in creating an optimal learning environment for pupils with ADHD.

4.4 Supporting Self-Regulation in Pupils with ADHD

Expanding upon the role of visual supports in enhancing academic performance, participants stressed their significance in fostering self-regulation among pupils. Throughout the

interviews, participants consistently acknowledged the value of visual timers and schedules in facilitating smooth transitions and promoting emotional stability. P2 and P5 highlighted the effectiveness of visual timers in providing a clear indication of activity duration, aiding children in preparing for transitions and 'avoiding frustration' (P2). Additionally, all participants expressed the benefits of visual schedules for 'providing structure and predictability' (P5) for pupils with ADHD. While P3 and P5 advocated for individualised visual schedules placed on the desks of pupils with ADHD, P4 described implementing a visual schedule for the entire class, noting its positive impact on pupils with ADHD. 'Although I use it for the whole class, it really helps them because they know what is coming next,' explained P4.

Moreover, participants highlighted additional strategies to foster self-regulation in pupils with ADHD. While P1 mentioned broader initiatives like the Zones of Regulation programme, implemented as a whole school initiative rather than a targeted strategy for pupils with ADHD, others, such as P3 and P5, emphasised interventions tailored specifically for this group. P3 highlighted an emphasis on emotional awareness and discussion with pupils with ADHD in her classroom, stating, 'I focus on getting these children to identify and discuss their feelings' and mentioned the use of an emotion thermometer for this purpose. Similarly, P5 described placing emotion thermometers on the desks of pupils with ADHD to aid emotional regulation throughout the day.

Lastly, it is worth noting that only two participants (P1 and P3) discussed the usefulness of sensory toys and tactile aids such as fidget cushions, velcro strips, and chewable jewellery, and only one participant (P4) mentioned breathing exercises.

4.5 Challenges and Support Needs in ADHD Management

Examining the difficulties associated with supporting pupils with ADHD in the classroom unveiled several notable concerns among participants. A prevailing theme in their responses was the lack of specific guidelines and adequate training for ADHD management. Each participant expressed frustration with the generalised nature of existing guidelines, stressing the critical need for more targeted resources and strategies. For instance, P1 emphasised the importance of dedicated policy documents for ADHD awareness and support strategies to facilitate 'effective planning and support for pupils with ADHD within mainstream classrooms.' Similarly, P2 reiterated this point, highlighting the challenges arising from a lack

of specific knowledge and training on ADHD. They remarked, ‘without proper guidance and understanding, how can we effectively address their needs?’

Additionally, some participants voiced concerns about the burden imposed by large class sizes, inadequate support staff and an overloaded curriculum, exacerbating the challenges of addressing ADHD in the classroom. P3 aptly captured this sentiment, noting, ‘another obvious challenge is time… the curriculum, as everyone knows, is overloaded, and having thirty-two in a class with a variety of needs does not make things easier.’

Another key concern raised by participants was the insufficient emphasis on in-service training related to ADHD within school settings. Participants lamented the lack of institutional support and promotion of training initiatives specifically tailored to ADHD. They emphasised that educators are responsible for educating themselves on ADHD, revealing a notable gap in institutional support for professional development in this area. For example, both P1 and P3 emphasised the need for educators to take the initiative in self-education, with P3 stating, ‘it is very much off our own back to educate ourselves.’ Similarly, P5 noted, ‘I have a basic knowledge of ADHD but only because I educated myself.’ Additionally, several participants observed a disparity in available resources compared to other conditions; ‘there are lots of resources for Autism Spectrum Disorder or Dyslexia but not much for ADHD,’ P2 exclaimed.

The data collected revealed a myriad of challenges faced by participants in supporting pupils with ADHD, prompting an overwhelming expression of the necessity for additional support and guidance in their classrooms. Alongside specific policies and guidelines, participants stressed the need for a tailored programme to enhance their knowledge of support strategies. P5 stated, ‘some sort of programme, specific to ADHD, would really help for ideas and stuff.’ Furthermore, participants strongly desired ongoing professional development opportunities and access to updated resources to better equip them with the requisite knowledge for effective classroom support. Many advocated for workshops or in-service days tailored not only to strategies for supporting children with ADHD but also providing information on the diagnosis itself. As P2 highlighted, ‘it is important for us to understand the impact ADHD has on children… how their minds work.’ Overall, the consensus among participants was the critical need for targeted guidance, training, and resources to empower teachers in effectively managing ADHD in the classroom.

4.6 Conclusion

The interviews revealed the diverse strategies teachers employ to support children with ADHD in the classroom, including differentiated instruction, positive reinforcement, and movement breaks. However, there is a clear consensus on the necessity for more tailored guidance and support to effectively address the specific needs of these pupils. The next chapter will critically analyse these findings in relation to the research questions and literature outlined in Chapter Two, highlighting recurring themes and areas for further research.

5 Chapter Five: Discussion

5.1 Introduction

This chapter critically analyses the findings from the semi-structured interviews with five teachers regarding their support strategies for children with ADHD in the classroom. It examines the data in relation to the research questions and secondary sources outlined in Chapter two, aiming to extract insights, interpret their significance, and explore implications for theory, policy, and practice. Key themes, including recurring patterns and areas of divergence from existing literature, will be explored to contribute to a deeper understanding of effective educational strategies for children with ADHD.

5.2 Integrated Approaches to Academic Support

The data reveals a consensus among participants regarding the effectiveness of clear and structured instructions for supporting the academic performance of children with ADHD in the classroom. Participants, akin to Barkley (2016), recognised the frequent challenges children with ADHD encounter in executive functioning, particularly in comprehending and following instructions. To address these challenges and enhance academic engagement, participants advocated for explicit step-by-step instructions and simplified explanations tailored to the attentional capacity of children with ADHD. This emphasis on clarity and structure resonates seamlessly with existing literature, which underscores the paramount importance of providing clear instructional guidance to alleviate cognitive workload for pupils with ADHD (Barkley, 2016; McDougal et al., 2022). Furthermore, one participant (P4) highlighted the utilisation of recalling and repeated instruction techniques to bolster pupils' academic performance, echoing the beliefs of Barkley (2016) and Creelman (2021) in the effectiveness of repeated instructions for supporting children with ADHD.

Both Barkley (2016) and Creelman (2021) advocate for extended time allowances to accommodate cognitive difficulties associated with ADHD. However, participants' responses sparked a debate. While some (P2) argued that additional time could enhance academic performance, others (P1 and P5) expressed scepticism, suggesting that it does not impact task completion due to the inherent attentional challenges these pupils face. This diversity of perspectives highlights the complexity of addressing ADHD-related difficulties in an educational context and evidences the need for further investigation into individual

differences in attentional capacity among children with ADHD. Additionally, P3's suggestion of combining shorter tasks with the option of more time highlights the importance of flexible support strategies tailored to individual needs. While extra time allowances may benefit some pupils, they may not comprehensively address underlying attentional issues. Therefore, teachers should consider a range of tailored interventions, emphasising the necessity for individualised and adaptable strategies to support the diverse needs of pupils with ADHD.

The findings highlight the efficacy of hands-on activities, visual aids, and concrete resources in aiding the academic performance of pupils with ADHD. Each participants' emphasis on these strategies suggests that leveraging diverse sensory inputs can help mitigate the attentional challenges faced by these pupils. This aligns with prior research by HADD (2005) and Woolfolk, Hughes, and Walkup (2012), which shows the benefits of multi-sensory instructional methods for engaging pupils with ADHD academically.

Furthermore, while one-to-one support from an adult was universally emphasised, one participant (P2) mentioned the advantages of peer tutoring and collaborative learning. This suggests that integrating social learning strategies may offer a complementary approach to one-on-one support, potentially enhancing the academic experiences of pupils with ADHD. This observation resonates with Vygotsky's socio-cultural theory (Vygotsky, 1978) and studies by DuPaul (2011), Pfiffner (2011) and McDougal et al., (2022), which indicate that cooperative learning activities can contribute to academic improvement.

However, it is noteworthy that the same participant also remarked on the variability in the effectiveness of peer tutoring depending on the individual child, suggesting that one approach may not suit all pupils. This insight further emphasises the complexity of implementing universal strategies and highlights the necessity for a diversified and personalised approach. The varied mention of peer tutoring suggests an area for further exploration. Specifically, understanding how different ADHD subtypes and co-occurring conditions influence the effectiveness of social learning strategies could lead to more tailored interventions, better supporting the diverse needs of pupils with ADHD.

5.3 Effective strategies for Managing ADHD Behaviour

The findings from this study align with existing literature, highlighting the efficacy of positive reinforcement in managing the behaviour of pupils with ADHD. Participants consistently advocated for individualised reward systems, emphasising their effectiveness in

promoting desired behaviours and intrinsic motivation. This mirrors the findings of Harlacher, Roberts, and Merrell (2006) and Barkley (2016), who underscore token reinforcement systems as pivotal in reducing disruptive behaviour and promoting compliance among pupils with ADHD. Notably, some participants stressed the importance of tailoring these reward systems to the individual interests of the pupils**,** such as the 'Minecraft-themed reward system' (P2), correlating with Du Paul's (2011) assertion that success depends on frequency, alignment with children's interests and regular modifications.

Additionally, P1's example of the 'fuzzy wuzzy jar' providing visual feedback exemplifies how tangible reward systems can maintain pupil engagement and motivation. This reflects immediate reinforcement, a concept supported by Barkley (2016), which helps bridge the gap between action and consequence, reducing hyperactivity and inattentiveness.

Most participants emphasised the vital role of verbal praise in fostering self-esteem and confidence among pupils with ADHD, aligning with research findings by Evans, Owens, and Bunford (2014) and Scheuermann, Hall, and Billingsley (2021). While P3 advocated for regular praise to boost self-confidence, P2 stressed the importance of specific feedback, 'not just "good job".' This nuanced approach speaks to the complexity of addressing ADHD in the classroom while also reflecting the significance of tailored interventions to support pupils with ADHD.

The findings underscore the critical role of movement breaks in managing the behaviour of pupils with ADHD, corroborating existing literature. While whole-class movement breaks, such as 'Go Noodle videos,' were deemed primarily effective in reducing disruptive behaviour, participants (P2 and P4) emphasised that additional individualised breaks are essential to fully support ADHD pupils' needs. This observation aligns with the findings of EPIC (2017) and HADD (2005), which stress the importance of regular movement breaks for fostering concentration and self-regulation among these pupils.

However, the participants' frustration over the lack of additional support, such as SNAs, presents a significant barrier to the practical implementation of individualised movement breaks. The inventive approaches taken by teachers, such as allocating classroom jobs to provide individual movement breaks despite the lack of support, highlight their dedication and resourcefulness in meeting the behavioural needs of pupils with ADHD. This also reveals the systemic issue of insufficient support, which can impede the effective implementation of strategies known to benefit pupils with ADHD.

The study illuminates the varied strategies teachers employ in seating arrangements to address ADHD behaviour. Participants' strategies ranged from placing pupils strategically at the end of a table to minimise distractions, as suggested by P1, to seating them near the teacher's desk for enhanced supervision, as noted by P4 and P5. These methods reflect an understanding of the importance of creating a conducive learning environment, as supported by research indicating that strategic seating significantly fosters attentiveness and positive behaviour among ADHD pupils (Reiber and Mclaughlin, 2004).

Interestingly, P2's approach of seating ADHD pupils alongside motivating peers underscores the social dimension of learning, suggesting that peer influence can impact behaviour management. This observation aligns with broader literature, including studies by Du Paul (2011), which emphasises the significance of social dynamics in classrooms and their influence on behavioural outcomes. These insights into seating arrangements highlight the complex nature of managing ADHD behaviour emphasising the need for tailored strategies that consider both environmental and social factors.

5.4 Supporting Self-Regulation in Pupils with ADHD

Visual supports emerged as a prominent theme, with participants emphasising the effectiveness of tools like visual timers and schedules in facilitating smooth transitions and emotional stability. This corresponds with prior research highlighting the importance of visual supports in enhancing self-regulation, attention, and positive behaviour among pupils with ADHD (Harlacher, Roberts, and Merrell, 2006; Du Paul, 2011; Barkley, 2015; Grosser, 2015 and ADHD Ireland, 2019). Particularly noteworthy is the participants' recognition of the individualised needs of pupils, as evidenced by the varied approaches to implementing visual supports, ranging from whole-class schedules to individualised desk schedules. This underscores the importance of flexibility and adaptability in catering to the diverse needs of pupils with ADHD.

Furthermore, participants highlighted emotional regulation strategies, enriching our understanding of interventions for the socio-emotional needs of pupils with ADHD. The mentioned initiatives include emotional awareness discussions and emotion thermometers, aligning with broader research on supporting emotional regulation in ADHD pupils (Barkley, 2015; ADHD Ireland, 2019). While not directly addressing specific strategies, these sources emphasise the importance of addressing socio-emotional needs. Barkley (2015) focuses on

managing ADHD symptoms through emotional regulation, while ADHD Ireland (2019) underscores the importance of structure and predictability, indirectly supporting tools like emotion thermometers and discussions.

Despite the consistency in findings regarding the effectiveness of certain strategies, such as visual supports, it is notable that only P1 and P3 discussed the usefulness of sensory aids, and only P4 mentioned breathing exercises. This limited reference suggests a possible lack of knowledge or divergence in opinion among participants concerning the effectiveness of these practices, despite literature indicating their benefits. McDougal et al., (2022) found sensory aids to be beneficial in improving task engagement and minimising excessive movement in children with ADHD. This disparity between research findings and practical application suggests a potential area for further exploration in understanding the effectiveness and implementation of these strategies in supporting self-regulation among pupils with ADHD.

5.5 Challenges and Support Needs in ADHD Management

The findings underscore significant barriers encountered by teachers in effectively supporting pupils with ADHD in classrooms, particularly their frustration with the generalised nature of existing guidelines (DES, 2017). This frustration highlights a critical issue identified in the literature, as understanding ADHD as a neurobiological condition necessitates specific strategies and supports, as noted by the APA (2013) and HADD (2018). This aligns with the participants' call for dedicated policy documents tailored to ADHD. Studies by Martinussen, Tannock, and Chaban (2011) and Ward, Kovshoff, and Kreppner (2021) further validate this need, revealing that teachers often feel unprepared to manage ADHD due to a lack of targeted guidance and training.

Moreover, participants' concerns about the lack of institutional support for in-service training further echo the findings of Martinussen, Tannock, and Chaban (2011) and Ward, Kovshoff, and Kreppner (2021). The self-education approach noted by P1, P3, and P5 underscores a systemic gap in professional development, revealing a significant challenge in staying updated with the latest research and effective practices for supporting ADHD. While the DES (2017) guidelines stress the vital role of teachers engaging in regular continual professional development to enhance the quality of provision for pupils with SEN, participants reported a noticeable disparity in the promotion of training initiatives specifically related to ADHD in their schools. Additionally, they emphasised the discrepancy in available resources for ADHD

compared to conditions like ASD, despite its prevalence. These discrepancies between policy intentions and implementation highlight the need for more extensive support systems addressing the unique challenges associated with ADHD in educational settings. This includes equitable resource distribution to ensure that all conditions, including ADHD, are adequately supported.

As highlighted by P2 and P3, concern about large class sizes, limited support staff, and an overloaded curriculum adds to the challenges faced in supporting children with ADHD. This overload of responsibilities further compounds the difficulty participants encounter in providing tailored support. It is notable that this issue emerged organically from the participants' experiences. Further research is, therefore, necessary to explore the extent to which class sizes and curriculum demands impact teachers' ability to support children with ADHD effectively.

In exploring the challenges faced by participants in supporting pupils with ADHD, it was unsurprising that they overwhelmingly expressed the necessity for additional support and guidance in their classrooms. Their concerns echo the broader consensus in the literature, emphasising the inadequacy of generic SEN training and the need for specialised knowledge and training programmes tailored to ADHD management. Specifically, participants articulated a strong desire for classroom support strategies and insights into the neurobiological aspects of the disorder, echoing arguments made by DuPaul and Stoner (2014). Additionally, P2's sentiment that 'without proper guidance and understanding, how can we effectively address their needs?' emerged as a recurring theme, indicating significant gaps in current teacher preparation programs. These findings underscore the urgent need for targeted guidance, training, and resources to empower teachers in effectively managing ADHD in the classroom.

5.6 Conclusion

This chapter critically analysed the findings in relation to the research questions and existing research outlined in Chapter Two. The identified effective strategies, such as structured instructions, positive reinforcement, and movement breaks, demonstrate practical approaches currently employed by teachers. However, significant challenges, including inadequate training, large class sizes, and limited institutional support, were also evident. These findings underscore the need for targeted guidance, professional development, and sufficient support

systems to empower teachers in effectively managing ADHD. The next chapter will synthesise these conclusions, discuss study limitations, and provide practical recommendations for policy and teaching practice improvements.

6 Chapter Six: Conclusion

6.1 Introduction

This study aimed to investigate strategies used by teachers to support pupils with ADHD in classrooms, focusing on effective practices for areas frequently impacted by ADHD, such as academic performance, behaviour, and self-regulation (Classi et al., 2012; Barkley, 2015). Additionally, it sought to identify barriers hindering teachers from effectively supporting these pupils. This final chapter summarises the main conclusions drawn and offers practical recommendations for policy and teaching practice while also suggesting avenues for future research to enhance the support provided to pupils with ADHD in educational settings.

6.2 Key Findings

The study revealed various classroom strategies for supporting pupils with ADHD, along with notable challenges and areas needing improvement.

Clear, structured instructions tailored to attentional capacities emerged as effective academic support, aligning with existing literature (Barkley, 2016; McDougal et al., 2022). However, the utility of extended time allowances and peer tutoring remains debated, highlighting the need for further investigation into individualised support strategies for different ADHD subtypes and instructional methods.

In terms of behaviour management, positive reinforcement and strategic seating arrangements were pivotal. Despite challenges related to limited support staff for individualised movement breaks, teachers demonstrated dedication and resourcefulness.

While visual supports and emotional regulation strategies proved effective for self-regulation, the use of sensory aids and breathing exercises varied despite the literature's advocacy (McDougal et al., 2022). Therefore, further exploration into their efficacy across different contexts is necessary.

Participants expressed frustration with the lack of specific guidelines and training for ADHD management, compounded by large class sizes and an overloaded curriculum. These findings emphasise the importance of tailored interventions for managing ADHD behaviour effectively, as well as the need for systemic changes in educational policy and targeted professional development programmes to better equip teachers in supporting pupils with ADHD.

6.3 Limitations

This study offers valuable insights, yet its small-scale nature restricts its generalisability to teachers nationwide. Additionally, reliance on self-reported data may introduce bias, and the qualitative approach, coupled with the researcher's prior experiences, could have influenced data interpretation. However, recruiting participants from five different schools, across multiple class levels adds depth to the responses and enriches the understanding of classroom dynamics across different age groups. Despite these limitations, the study effectively identified classroom strategies and challenges in supporting pupils with ADHD.

6.4 Recommendations

Several recommendations have emerged from the findings of this study.

6.4.1 Recommendations for Further Research

While this study has highlighted significant barriers in supporting pupils with ADHD, further research is needed to fully understand these challenges. Conducting a longitudinal investigation into teachers' day-to-day experiences in primary classrooms could offer deeper insights into the evolving nature of these challenges and the effectiveness of current support systems. Additionally, exploring the efficacy of different interventions, such as behavioural management strategies and academic accommodations across different ADHD subtypes, could provide valuable guidance for teachers and policymakers. Ultimately, these efforts aim to identify the most effective school-based interventions and support structures to optimise outcomes for children with ADHD.

6.4.2 Recommendations for Policy and Practice

Given the frustration with current guidelines (DES, 2017), there is a pressing need for dedicated policies and guidelines tailored to ADHD. These documents would provide teachers with specific guidance and strategies, addressing the identified gaps and ensuring a more nuanced understanding of their role in supporting pupils with ADHD.

Participants overwhelmingly reported a lack of ADHD-specific training, echoing existing studies (Martinussen, Tannock, and Chaban, 2011; Ward, Kovshoff, and Kreppner, 2021). Therefore, educational institutions should prioritise comprehensive training initiatives on ADHD management during both pre-service education and ongoing professional

development. For instance, schools should provide in-service days focused specifically on ADHD management, encompassing the neurobiological aspects of the disorder, as well as practical classroom strategies. This would equip educators with the necessary knowledge, targeted resources, and opportunities for effective provision.

6.5 Concluding Remarks

This study sheds light on the multifaceted nature of supporting pupils with ADHD in mainstream primary classrooms. While teachers employ various approaches to enhance academic performance, manage behaviour, and support self-regulation, significant challenges persist. Given the global prevalence of ADHD in children (Polanczyk et al., 2014), addressing these challenges through targeted policy changes, enhanced professional development, and further research will be imperative in empowering teachers and improving outcomes for pupils with ADHD. This study's insights and recommendations offer an avenue to inform and inspire ongoing efforts to create more inclusive and supportive educational environments for all pupils.

7 Reference list

ADHD Ireland (2019) *The Importance of a Daily Schedule for Kids with ADHD: Back to school Series.* Available at: The Importance of a Daily Schedule for Kids with ADHD - Back to School Series - ADHD Ireland [Accessed: 20 Sept 2023].

ADHD Ireland (2022) *What is ADHD.* Available at: What is ADHD? - ADHD Ireland [Accessed:13 Sept 2023].

Alharahsheh, H. H. and Pius, A. (2020) 'A Review of Key Paradigms: Positivism Vs Interpretivism', *Global Academic Journal of Humanities and Social Sciences*, 2(3), pp.39-43. Available at: https://www.gajrc.com/media/articles/GAJHSS_23_39-43_VMGJbOK.pdf [Accessed: 24 Nov 2023].

American Psychiatric Association (2013) *Diagnostic and Statistical Manual of Mental Disorders (DSM-5).* 5th edn. USA: American Psychiatric Publishing Inc.

American Psychiatric Association (2022) *Diagnostic and Statistical Manual of Mental Disorders: Text Revision (DSM-5-TR).* 5th edn. USA: American Psychiatric Publishing Inc.

Anderson, C. (2010) 'Presenting and Evaluating Qualitative Research', *American Journal of Pharmaceutical Education*, 74(8), 141. DOI: https://doi.org/10.5688/aj7408141

Arnold, L.E., Hodgkins, P., Kahle, J., Madhoo, M., and Kewley, G. (2020) 'Long-term Outcomes of ADHD: Academic Achievement and Performance', *Journal of Attention Disorders*, 24(1), pp.73–85. DOI: https://doi.org/10.1177/1087054714566076

Barkley, R.A. (2015) *Attention Deficit Hyperactivity Disorders: A Handbook for Diagnosis and Treatment*. 4th edn. New York: Guilford Press.

Barkley, R.A. (2016) *Managing ADHD in School: The Best Evidence-Based Methods for Teachers*. Eau Claire: PESI Publishing & Media.

Bell, J. (2010) *Doing Your Research Project: A Guide for First Time Researchers in Education, Health, and Social Science*. 5th edn. Maidenhead: Open University Press.

Blaxter, L., Hughes, C. and Tight, M. (2010) *How to Research*. 4th edn. Maidenhead: Open University Press.

Braun, V., and Clarke, V. (2006) 'Using Thematic Analysis in Psychology', *Qualitative Research in Psychology, 3*(2), pp.30–101. DOI: https://doi.org/10.1191/1478088706qp063oa

British Educational Research Association (BERA) (2018) *Ethical Guidelines for Educational Research.* 4th edn. [Online] Available at: https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018-online [Accessed: 22 Nov 2023].

Brown, T.E. (2013) *A New Understanding of ADHD in Children and Adults: Executive Function Impairments*. New York: Routledge.

Carpenter Rich, E., Loo, S.K., Yang, M., Dang, J. and Smalley, S.L. (2009) 'Social Functioning Difficulties in ADHD: Association with PDD Risk', *Clinical Child Psychology and Psychiatry,* 14(3), pp.329-44. DOI: https://doi.org/10.1177/1359104508100890

Caye, A., Spadini, A.V., Karam, R.G., Grevet, E.H., Rovaris, D.L., Bau, C.H., and Kieling, C. (2016) 'Predictors of Persistence of ADHD into Adulthood: A Systematic Review of the

Literature and Meta-Analysis', *European Child, and Adolescent Psychiatry*, 25(11), pp.1151-1159. DOI: https://doi.org/10.1007/s00787-016-0831-8

Center for Disease and Control Prevention (2022) *What is ADHD.* Available at: What is ADHD? | CDC [Accessed: 12 Sept 2023].

CHADD (2017) *The Science of ADHD.* Available at: The Science of ADHD - CHADD [Accessed: 19 Sept 2023].

Clarfield, J. and Stoner, G. (2005) 'The Effects of Computerized Reading Instruction on the Academic Performance of Students Identified with ADHD', *School Psychology Review*, 34(2), pp.246–254. DOI: https://doi.org/10.1080/02796015.2005.12086286

Classi, P., Milton, D., Ward, S., Sarsour, K. and Johnston, J. (2012) 'Social and Emotional Difficulties in Children with ADHD and the Impact on School Attendance and Healthcare Utilization', *Child and Adolescent Psychiatry and Mental Health,* 33, DOI: https://doi.org/10.1186/1753-2000-6-33

Coghill, D.R., Seth, S. and Matthews, K. (2014) 'A Comprehensive Assessment of Memory, Delay, Aversion, Timing, Inhibition, Decision Making and Variability in Attention Deficit Hyperactivity Disorder: Advancing Beyond the Three-Pathway Models', *Psychological Medicine*, 44(9), pp.1989–2001. DOI: https://doi.org/10.1017/s0033291713002547

Cohen, L., Manion, L. and Morrison, K. (2018) *Research Methods in Education.* 8th edn. New York: Routledge.

Creelman, K. (2021) 'A Literature Review of Understanding and Supporting Students with Attention Deficit Hyperactivity Disorder in the Classroom', *Northwest Journal of Teacher Education*, 16(10). DOI: https://doi.org/10.15760/nwjte.2021.16.1.3

Creswell, J. W. (2017) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed., Newbury Park: Sage Publications.

Creswell, J.W. (2012) *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. 4th edn. Upper Saddle River, NJ: Pearson Prentice Hall.

Creswell, J.W. and Miller, D.L (2010) 'Determining Validity in Qualitative Inquiry', *Theory into Practice*, 39(3), pp.124-130. DOI: https://doi.org/10.1207/s15430421tip3903_2

Creswell, J.W. and Poth, C. N. (2018) *Qualitative Inquiry and Research Method: Choosing Among Five Approaches.* 4th edn. Thousand Oaks, California: Sage Publications.

Data Protection Act 2018, No. 7, Dublin: Government of Ireland.

De Schipper, E., Lundequist, A., Wilteus, A.L., Coghill, D., De Vries, P.J., Granlund, M., Holtmann, M., Jonsson, U., Karande, S., Levy, F., Al-Modayfer, O., Rohde, L., Tannock, R., Tonge, B., and Bölte, S.A. (2015) 'Comprehensive Scoping Review of Ability and Disability in ADHD Using the International Classification of Functioning, Disability and Health-Children and Youth Version (ICF-CY)', *European Child and Adolescent Psychiatry,* 24(8), pp.859-72. DOI: https://doi.org/10.1007/s00787-015-0727-z

Denzin, N. K., and Lincoln, Y. S. (Eds.) (2018) *The SAGE Handbook of Qualitative Research.* Sage Publications.

Department of Education (2002) *Circular 08/02: Applications for Full-Time or Part-Time Resource Teacher Support to Address the Special Education Needs of Children with Disabilities.* Available at: https://www.gov.ie/pdf/?file=https://assets.gov.ie/12739/71e2e109db2a4840a589961c79763709.pdf#page=null [Accessed: 27 Sept 2023].

Department of Education and Science (DES) (2017) *Guidelines for Primary Schools: Pupils with Special Educational Needs in Mainstream Schools.* Available at: https://www.gov.ie/pdf/?file=https://assets.gov.ie/86911/e2ab0e65-f360-45a4-8075-37a4123838c3.pdf#page=null [Accessed: 28 Sept 2023].

Du Paul, G. J. and Stoner, G. (2014) *ADHD in Schools: Assessment and Intervention Strategies,* 3rd edn. New York: Guilford Publications.

Du Paul, G.J. (2011) 'ADHD in the Classroom: Effective Intervention Strategies', *Theory into Practice,* 50(1), pp. 35-42. DOI: http://dx.doi.org/10.1080/00405841.2011.534935

Edinburgh Psychoeducation Intervention for Children and Young People (EPIC) (2017) *The EPIC Strategy Booklet: A Guide for Teachers.* Available at: The EPIC Strategy Booklet: a guide for teachers (adhdfoundation.org.uk) [Accessed: 18 Sept 2023].

Egeland, J., Ueland, T., and Johansen, S. (2012) 'Central Processing Energetic Factors Mediate Impaired Motor Control in ADHD Combined Subtype but not in ADHD Inattentive Subtype', *Journal of Learning Disabilities*. 45(4), pp.361–370. DOI: https://doi.org/10.1177/0022219411407922

Evans, S., Owens, J. and Bunford, N. (2014) 'Evidence-Based Psychosocial Treatments for Children and Adolescents with Attention-Deficit/Hyperactivity Disorder', *Journal of Clinical Child and Adolescent Psychology*, 43(4), pp.527-551. DOI: https://doi.org/10.1080/15374416.2017.1390757 [Accessed 20 Sept 2023].

Fadhel K. (2002) 'Positivist and Hermeneutic Paradigm, A Critical Evaluation under their Structure of Scientific Practice', *The Sosland Journal*, 3(5), pp.21-28.

Faraone, S.V. and Larsson, H. (2019) 'Genetics of Attention Deficit Hyperactivity Disorder', *Molecular Psychiatry,* 24(4), pp. 562-575. DOI: https://doi.org/10.1038/s41380-018-0070-0

Faraone, S.V., Biederman, J. and Mick, E. (2006) 'The Age-Dependent Decline of Attention Deficit Hyperactivity Disorder: A Meta-Analysis of Follow-Up Studies', *Psychological Medicine*, 36(2), pp.159–165. DOI: http://dx.doi.org/10.1017/S003329170500471X

Flick, U. (2014) *An Introduction to Qualitative Research*. 4th edn. London: Sage Publications.

General Data Protection Regulation (GDPR) (2018) *General Data Protection Regulation (GDPR).* [Online] Available at: https://www.gov.ie/pdf/?file=https://assets.gov.ie/135704/0aed0807-f8a7-44c2-a00c-94d262f5b8e6.pdf#page=null [Accessed: 24 Nov 2023].

Golafshani, N. (2003) 'Understanding Reliability and Validity in Qualitative Research', *The Qualitative Report*, 8(4), pp.597-607, DOI: http://dx.doi.org/10.46743/2160-3715/2003.1870

Grosser, D. (2015) *Classroom Interventions for Attention Deficit Hyperactivity Disorder Considerations Packet.* Available at: adhd.pdf (wm.edu) [Accessed: 23 Sept 2023].

HADD (2005) *Attention Deficit Hyperactivity Disorder ADHD and Education: A Resource for Teachers*. Available at: https://parenthubdonegal.ie/wp-content/uploads/2018/06/ADHD-and-Education.pdf [Accessed: 13 Sept 2023].

HADD (2018) *What is ADHD/ADD.?* Available at: www.hadd.ie [Accessed: 13 Sept 2023].

Hallahan, K. (2021) *Attention Deficit Hyperactivity Disorder (ADHD): Information for Parents*. Available at: ADHD Information For Parents (adhdireland.ie) [Accessed: 14 Sept 2023].

Hancock, B., Windridge, K. and Ockleford, E. (2009) *An Introduction to Qualitative Research: The NIHR Research Design Service for Yorkshire & the Humber,* National institute for Health Research. [Online] Available at: https://www.academia.edu/download/54784339/5_Introduction-to-qualitative-research-2009.pdf [Accessed: 25 Nov 2023].

Harding, J. (2013) *Qualitative Data Analysis: From Start to Finish*. Thousand Oaks, CA: Sage Publications.

Harlacher, J.E., Roberts, N.E., and Merrell, K.W. (2006) 'Classwide Interventions for Students with ADHD', *Teaching Exceptional Children*, 39(2), pp.6-12. DOI: http://dx.doi.org/10.1177/004005990603900202

Hatch, J.A. (2002) *Doing Qualitative Research in Education Settings*. Albany: SUNY Press

Jonsen, K., and Jehn, K.A. (2009) 'Using Triangulation to Validate Themes in Qualitative Studies', *Qualitative Research in Organizations and Management,* 4(2), pp.123-150, DOI: http://dx.doi.org/10.1108/17465640910978391

Kuriyan, A.B., Pelham, W.E., Molina, B.S.G., Waschbusch, D.A., Gnagy, E.M., Sibley, M.H., Babinski, D.E., Walther, C., Cheong, J., Ju, J., and Kent, K.M. (2013) 'Young Adult Educational and Vocational Outcomes of Children Diagnosed with ADHD', *Journal of Abnormal Child Psychology*, 41, pp.27–41. DOI: https://doi.org/10.1007/s10802-012-9658-z

Lacey, A., and Luff, D. (2007) *Qualitative Data Analysis*, National Institute for Health Research. [Online] Available at: https://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/9_Qualitative_Data_Analysis_Revision_2009.pdf [Accessed: 26 Nov 2023].

Law, G.U., Sinclair, S., and Fraser, N. (2007) 'Children's Attitudes and Behavioural Intentions Towards a Peer with Symptoms of ADHD: Does the Addition of a Diagnostic Label Make a Difference?', *Journal of Child Health Care,* 11(2), pp.98–111. DOI: https://doi.org/10.1177/1367493507076061

Mackenzie, N. and Knipe, S. (2006) 'Research Dilemmas: Paradigms, Methods and Methodology', *Issues In Educational Research*, 16(2), pp.1-15, Available at: https://www.researchgate.net/publication/273135528_Research_dilemmas_Paradigms_methods_and_methodology [Accessed: 23 Nov 2023].

Martinussen, R., Tannock, R. and Chaban, P. (2011) 'Teachers' Reported Use of Instructional and Behavior Management Practices for Students with Behavior Problems: Relationship to Role and Level of Training in ADHD', *Child & Youth Care Forum*, 40(3), pp.193–210. DOI: https://doi.org/10.1007/S10566-010-9130-6

Mautone, J.A., DuPaul, G.J. and Jitendra, A.K. (2005) 'The Effects of Computer-Assisted Instruction on the Mathematics Performance and Classroom Behavior of Children with

Attention Deficit/Hyperactivity Disorder', *Journal of Attention Disorders,* 9(1), pp.301–312. DOI: https://doi.org/10.1177/1087054705278832

McDougal, E., Tai, C., Stewart, T.M., Booth, J.N. and Rhodes, S.M. (2022) 'Understanding and Supporting Attention Deficit Hyperactivity Disorder (ADHD) in the Primary School Classroom: Perspectives of Children with ADHD and their Teachers', *Journal of Autism and Developmental Disorders*, 53(9) pp.3406-3421. DOI: https://doi.org/10.1007/s10803-022-05639-3

McGrath, C., Palmgren, P.J. and Liljedahl, M. (2019) 'Twelve Tips for Conducting Qualitative Research Interviews', *Medical Teacher*, 41(9), pp.1002-1006. DOI: https://doi.org/10.1080/0142159X.2018.1497149

Melegari, M.G., Bruni, O., Sacco, R., Barni, D., Sette, S., Donfrancesco, R. (2018) Comorbidity of Attention Deficit Hyperactivity Disorder and Generalized Anxiety Disorder in Children and Adolescents', *Psychiatry Research,* 270, pp.780-785. DOI: https://doi.org/10.1016/j.psychres.2018.10.078

Merriam, S. B., and Tisdell, E. J. (2016) *Qualitative Research: A Guide to Design and Implementation*. 4th edn. California: Jossey-Bass.

Miller, M., Musser, E.D., Young, G.S., Olson, B., Steiner, R.D. and Nigg, J.T. (2019) 'Sibling Recurrence Risk and Cross-Aggregation of Attention-Deficit/Hyperactivity Disorder and Autism Spectrum Disorder', *JAMA Pediatrics.* 173(2), pp.147–152. DOI: https://doi.org/10.1001%2Fjamapediatrics.2018.4076

Mokobane, M., Pillay, B.J. and Meyer, A. (2019) 'Fine Motor Deficits and Attention Deficit Hyperactivity Disorder in Primary School Children', *South African Journal of Psychiatry,* 25, DOI: https://doi.org/10.4102%2Fsajpsychiatry.v25i0.1232

Mueller, A. K., Fuermaier, A. B., Koerts, J., and Tucha, L. (2012) 'Stigma in Attention Deficit Hyperactivity Disorder', *Attention Deficit and Hyperactivity Disorders*, 4(3), pp.101–114. DOI: https://doi.org/10.1007/s12402-012-0085-3

Murray, A.L., Booth, T., Eisner, M., Auyeung, B., Murray, G. and Ribeaud, D. (2019) 'Sex Differences in ADHD Trajectories Across Childhood and Adolescence', *Developmental Science,* 22(1). DOI: https://doi.org/10.1111/desc.12721

Patton, M.Q. (2014) *Qualitative Research & Evaluation Methods*. 4th edn. Thousand Oaks, California, Sage Publications.

Piffner, L. J. (2011) *All about ADHD: The Complete Practical Guide for Classroom Teachers*. 2nd edn. New York: Scholastic.

Polanczyk, G.V., Willcutt, E.G., Salum, G.A., Kieling, C., and Rohde, L.A. (2014) 'ADHD Prevalence Estimates Across Three Decades: An Updated Systematic Review and Meta-Regression Analysis', *International Journal of Epidemiology,* 43(2), pp.434-42. DOI: https://doi.org/10.1093/ije/dyt261

Reale, L. Bartoli, B. Cartabia, M., Zanetti, M., Costantine, M.A, Canevini, P., Termine, C. and Bonati, M. (2017) 'Comorbidity Prevalence and Treatment Outcome in Children and Adolescents with ADHD', *European Child and Adolescent Psychiatry,* 26(1), pp.1443-1457. DOI: 10.1007/s00787-017-1005-z

Reiber, C. and Mclaughlin, T.F. (2004) 'Classroom Interventions: Methods to Improve Academic Performance and Classroom Behaviour for Students with Attention Deficit

Hyperactivity Disorder', *International Journal of Special Education*, 19(1), pp.1-13. Available at: (PDF) Classroom interventions: Methods to improve academic performance and classroom behavior for students with attention-deficit/hyperactivity disorder (researchgate.net) [Accessed 20 Sept 2023].

Rhodes, S. M., Park, J., Seth, S., and Coghill, D. R. (2012) 'A Comprehensive Investigation of Memory Impairment in Attention Deficit Hyperactivity Disorder and Oppositional Defiant Disorder: Memory in ADHD and ODD', *Journal of Child Psychology and Psychiatry,* 53(2), pp.128–137. DOI: https://doi.org/10.1111/j.1469-7610.2011.02436.x

Robinson, O. C. (2014) 'Sampling in Interview-Based Qualitative Research: A Theoretical and Practical Guide', *Qualitative Research in Psychology*, 11(1), pp.25–41. DOI: https://doi.org/10.1080/14780887.2013.801543

Sayal, K., Prasad, V., Daley, D., Ford, T., and Coghill, D. (2018) 'ADHD in Children and Young People: Prevalence, Care Pathways, and Service Provision', *The Lancet Psychiatry*, 5(2), pp.175–186. DOI: http://dx.doi.org/10.1016/S2215-0366(17)30167-0

Scheuermann, B. K., and Hall, J. A. (2021) *Positive Behavioral Supports for the Classroom.* 4th edn. Boston, MA: Pearson book.

Scott, D. and Morrison, M. (2006) *Key ideas in educational research*. London: Continuum International Publishing.

Semrud-Clikeman, M., Walkowiak, J., Wilkinson, A., and Butcher, B. (2010) 'Executive Functioning in Children with Asperger Syndrome, ADHD-Combined Type, ADHD-Predominately Inattentive Type, and Controls', *Journal of Autism and Developmental Disorders,* 40, pp.1017-1027. DOI: https://doi.org/10.1007/s10803-010-0951-9.

Starck, M., Grünwald, J., and Schlarb, A.A. (2016) 'Occurrence of ADHD in Parents of ADHD Children in a Clinical Sample', *Neuropsychiatric Disease and Treatment'*, 12, pp.581-588. DOI: https://doi.org/10.2147%2FNDT.S100238

Taylor, P.C. and Medina, M. N. (2013) 'Educational Research Paradigms: From Positivism to Multiparadigmatic', *Journal for Meaning-Centered Education*, 1, pp.2-13, DOI: http://dx.doi.org/10.13140/2.1.3542.0805

Thome, J., Ehlis, A., Fallgatter, A.J., Krauel, K., Lange, K.W., Riederer, P., Romanos, M., Taurines, R., Tucha, O., Uzbekov, M., and Manfred, G. (2012) 'Biomarkers for Attention-Deficit/Hyperactivity Disorder (ADHD). A Consensus Report of the WFSBP Task Force on Biological Markers and the World Federation of ADHD', *The World Journal of Biological Psychiatry*, 13(5), pp.379–400. DOI: https://doi.org/10.3109/15622975.2012.690535

Ulrich, C.G. (1999) 'Deutungsmusteranalyse und Diskursives Interview,' *Zeitschrififir Soziologie*, 28, pp.429-447.

Vacher, C., Goujan, A., Romo, L. and Purper-Ouakil (2020) 'Efficiency of Psychological Interventions for Children with ADHD and Emotional Dysregulation: A Systematic Review', *Psychiatry Research*, 291. DOI: https://doi.org/10.1016/j.psychres.2020.113151

Vygotsky, L. S. (1978) *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Waheed, Z., Kiazai, A.N. and Bahadur W. (2020) 'Ethics and Validity as Core Issues in Qualitative Research: A Review Paper', *Pakistan Journal of Educational Research*, 3(2), pp.123-134, DOI: http://dx.doi.org/10.52337/pjer.v3i2.42

Ward, R. J., Kovshoff, H. and Kreppner, J. (2021) 'School Staff Perspectives on ADHD and Training: Understanding the Needs and Views of UK Primary Staff, Emotional and Behavioural Difficulties', *Emotional and Behavioural Difficulties*, 26(3), pp.306-321. DOI: https://doi.org/10.1080/13632752.2021.1965342

Woolfolk, A., Hughes, M. and Walkup, V. (2012) *Psychology in Education*, 2nd edn. United Kingdom: Pearson Education.

8 Appendices

8.1 Appendix 1: Principal Letter

Principal's name and school address

[Date]

Dear Principal,

I hope this letter finds you well. I am currently pursuing my Professional Masters in Primary Education with Hibernia College and am reaching out to seek your support for my research project titled 'Teachers' Perspectives on Strategies to Support the Academic Performance, Behaviour, and Self-regulation of Pupils with a Diagnosis of ADHD in Irish Mainstream Primary Classrooms.'

The primary aim of this research is to explore the strategies employed by teachers in supporting pupils with ADHD. As key contributors to shaping the educational experience of these pupils, your insights are crucial. This letter serves as an introduction to the project, and I am seeking your consent to proceed.

With your permission, I would like to interview five mainstream classroom teachers from your school. These teachers will participate in short (20-30 mins approx.) face to face semi-structured interviews to provide valuable perspectives on strategies used to support the academic performance, behaviour, and self-regulation of pupils with ADHD. Enclosed, please find a copy of the information and consent forms for your review. Only teachers who return a signed consent form will be selected to participate in the study. This research study has received Ethics approval from Hibernia College Dublin and all data collection will strictly adhere to the school's ethical code of conduct.

Information gathered will be treated with the utmost confidentiality, using pseudonyms for anonymity. The school's name will not be disclosed in any research findings. Interviews will be audio recorded, and data will be securely held following Hibernia College Research Ethics Guidelines. Participation is voluntary, and participants can withdraw at any time. Results will be reported in my project and may be shared through professional publications.

I kindly request your cooperation in granting access to the selected staff members over the coming weeks. If you have any questions or need further information, please feel free to contact me.

Mobile: (087) 333333 Email: XXXXX@gmail.com

I look forward to hearing from you and thank you for your consideration.

Yours Sincerely,

The Researcher Date: _____

8.2 Appendix 2: Research Information Sheet

Title of Study: Teachers' Perspectives on Strategies to Support the Academic Performance, Behaviour and Self-Regulation of Pupils with a Diagnosis of ADHD in Irish Mainstream Primary Classrooms

Dear XXX

I am writing to inform you about a research study that I will be conducting as part of my Professional Master's in Primary Education degree and to kindly request your participation.

Attention Deficit Hyperactivity Disorder (ADHD) is a prevalent condition, impacting approximately 5% of children globally (Polanczyk et al., 2014). This condition can significantly impact children's academic performance, behaviour, and self-regulation throughout their school years (Vacher et al., 2020; APA, 2022). Therefore, teachers play a pivotal role in implementing strategies to support pupils with ADHD in addressing these challenges.

The proposed research aims to: investigate the classroom-based strategies and resources currently employed by teachers to enhance the academic performance, manage behaviour, and foster self-regulation in pupils with ADHD, examine the challenges associated with supporting pupils with ADHD and explore ways to enhance teacher's capacity to effectively support pupils with ADHD.

Participation involves a short (20-30 mins approx.) face-to-face semi-structured interview with the researcher. The interview will be audio recorded and transcribed with a copy made available to you on request. All collected data will be securely stored on a password-protected laptop and safeguarded with encryption software. Strict confidentiality and anonymity will be maintained, protecting participant identities using pseudonyms during the analysis and reporting of findings. Participation is entirely voluntary, and you have the right to withdraw at any time.

Thank you for considering this request. If you wish to participate, please review the attached informed consent form, and return it to XXXX@gmail.com . For any questions or clarifications, please feel free to contact me at the mentioned email address. I look forward to hearing from you.

Yours Sincerely,

XXXXXX

8.3 Appendix 3: Participant Consent Form

Title of Study: Teachers' Perspectives on Strategies to Support Academic Performance, Behaviour and Self-Regulation of Pupils with a Diagnosis of ADHD in Irish Mainstream Primary Classrooms

1. I have been fully informed and read the information sheet about this study. Yes/No
2. I have had the opportunity to ask questions and discuss this study. Yes/No
3. I have received satisfactory answers to all my questions if asked. Yes/No
4. I understand that I am free to withdraw from this study at any time without giving a reason and without consequence. Yes/No
5. I have been informed that a copy of this consent form will be kept by the researcher. Yes/No
6. Do you agree to take part in this study, with the possibility of publication or presentation of results? Yes/No
7. Are you satisfied that any information you give to the researcher will be kept confidential, with no mention of your name or school in the research report? Yes/No

I agree to participate in this research study.

Participant's name (printed) _____

Signature: _____ Date: _____

Researcher's name (printed) _____

Signature: _____ Date: _____

8.4 Appendix 4: Topic Guide Before Pilot

Topic Guide	Interview Questions and Probes
Opener	What experience do you have with working with pupils with a diagnosis of ADHD?
Academic Instruction	What strategies do you use if any, to support the academic performance of pupils with ADHD in your classroom?
Behaviour	What strategies do you use if any, to manage the behaviour of pupils with ADHD in your classroom?
Self-Regulation	What strategies do you use if any, to foster self-regulation in pupils with ADHD in your classroom?
Primary Policy/Guidelines	Are you aware of the Guidelines for Primary Schools: Pupils with Special Educational Needs in Mainstream Schools, and if so, do you use these guidelines to inform your planning and support strategies for pupils with ADHD? • Do you find the guidelines beneficial for planning and supporting pupils with ADHD? If yes, why? If not, what improvements or shortcomings do you perceive?
Challenges	What challenges if any, do you face when supporting pupils with ADHD in your classroom?
Perceptions on Additional Teacher Supports	From your experience, would you welcome additional supports or guidance to help you in supporting pupils with ADHD effectively in your classroom?

8.5 Appendix 5: Topic Guide Amended

Topic Guide	Interview Questions and Probes
Opener	Tell me about your experience with working with pupils with a diagnosis of ADHD? • As you know this study is concerned with supporting the academic performance, behaviour, and self-regulation of pupils with ADHD, is this something you do in your classroom?
Academic Instruction	What strategies do you use if any, to enhance the academic performance of pupils with ADHD in your classroom? • Multi-sensory teaching approach? • Repeated instruction? • Allocating extra time? • What strategy, if any, would you say is the most effective?
Behaviour	What strategies do you use if any, to manage the behaviour of pupils with ADHD in your classroom? • Reward Systems? • Individual Praise? • What strategy, if any, would you say is the most effective?
Self-Regulation	What strategies do you use if any, to foster self-regulation in pupils with ADHD in your classroom? • Likert scale? • Timers? • What strategy, if any, would you say is the most effective?
Additional strategies/resources	Are there any additional resources/strategies you use to support pupils with ADHD in your classroom, if so, can you give examples of them? • Classroom structure/Seating Arrangements? • Visual Schedules?
Primary Policy/Guidelines	Are you aware of the Guidelines for Primary Schools: Pupils with Special Educational Needs in Mainstream Schools, and if so, do you use these guidelines to inform your planning and support strategies for pupils with ADHD? • Do you find the guidelines beneficial for planning and supporting pupils with ADHD? If yes, why? If not, what improvements or shortcomings do you perceive?
Challenges	What challenges if any, do you face when supporting pupils with ADHD in your classroom?
Perceptions on Additional Teacher Supports	From your experience, would you welcome additional supports or guidance to help you in supporting pupils with ADHD effectively in your classroom? • If so, what additional supports do you think would be helpful?

8.6 Appendix 6: Phases of Thematic Analysis, adapted from Braun and Clarke (2006, p.35)

Phase	Description of the process
1. Familiarising yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking in the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

8.7 Appendix 7: Coding Method

Open-Coding of Data			
Differentiated workload (DF)	Praise (P)	Seating arrangements (SA)	Limited support staff (LSS)
Repeated instruction (RI)	Step-by-Step instructions (SSI)	Movement breaks (MB)	Continuous professional development (CPD)
Visual aids (VA)	Individualised reward systems (IRS)	Emotion thermometers (ET)	Lack of resources (LR)
Concrete resources (CR)	Positive Reinforcement (PR)	Zones of Regulation (ZR)	Multi-sensory approach (MSA)
Shorter tasks (ST)	Whole-Class reward systems (WCRS)	Sensory toys (ST)	Breathing exercises (BE)
Extra time (ET)	Visual timers (T)	Lack of specific guidelines (LOSG)	Curriculum and class demands (CCD)
Individualised support (IS)	Visual schedules (VS)	Need for tailored support and training (NTST)	Peer tutoring (PT)

Codes Refined	
1. **Integrated Approaches to Academic Support**	Differentiated workload, repeated instruction, visual aids, concrete resources, peer tutoring, individualised support, extra time, step-by-step instructions multi-sensory approach and shorter tasks.
2. **Effective Strategies for Managing ADHD Behaviour**	Movement breaks, individualised reward systems, praise, positive reinforcement, whole class reward systems, seating arrangements
3. **Supporting Self-Regulation in Pupils with ADHD**	Visual timers, visual schedules, emotion thermometers, sensory toys, Zones of Regulation, breathing exercises.
4. **Challenges and Support Needs in ADHD Management**	Lack of specific guidelines, need for tailored support and training, curriculum and class demands, continuous professional development, lack of resources, and limited support staff.

8.8 Appendix 8: Coded Interview Transcript

1. What strategies do you use, if any, to enhance the academic performance of pupils with ADHD in your classroom?

Over the years I have tried various strategies. This year I have found that giving them **extra time during tasks** and activities really helps. Since children with ADHD find it hard to focus, I find giving them extra time or even **getting them to start the task earlier** than the rest allows them to work at their own pace. Also, **peer tutoring**, where I pair children with ADHD with **more capable peers**, has been really helpful. It allows them to **learn from each other** and provides academic support.

- Differentiated Workload
- Extra time
- Shorter Tasks
- Peer tutoring

2. Are there any other strategies you find helpful for supporting their academic engagement?

Another strategy is providing **clear and concise instructions**. **Breaking tasks into steps** and **using visuals** helps them understand better. I also provide **extra teacher modelling**, like demonstrating handwriting on the board, to make concepts clearer for them.

- Step-by-step instructions
- Visual Aids
- Individualised instruction

3. In terms of behaviour, what strategies do you use, if any, to help manage the behaviour of pupils with ADHD in your classroom?

For behaviour, I use different reward systems. I use **pom poms in a jar for the whole class**, and then I have an **individual reward system** for the two children with ADHD. I created a Minecraft-themed system **tailored to their interests**. They **earn blocks** for displaying positive behaviour, and when they've earned all blocks, they get a reward, like usually something from the lucky dip. **It is visible on their desk**, motivating them to earn more blocks each day.

- Whole-Class reward system
- Individualised reward system
- Positive reinforcement
- Concrete resources

4. What strategies do you use if any, to foster self-regulation in pupils with ADHD in your classroom?

So, **movement breaks** are a big one so for example Go Noodle videos, short walks or even getting them to do a job for me. These things really help regulate their emotions because it **gets them out of their seats**. Another thing as well is using **visual timers.** In my classroom, I find them great for transitions or tasks they make things smoother and help the children manage themselves without getting all frustrated.

- Movement breaks
- Visual timers

5. Are there any additional resources/strategies you use to support pupils with ADHD in your classroom?

Yes, I also use **visual schedules**, to show the day's lessons and breaks. It is good for the whole class, but especially for children with ADHD, it gives them **structure and predictability**. I have also set up seating arrangements specifically for these children. They are **close to the door** for quick breaks if needed, and next to **positive role models** because it seems to help both their behaviour and focus.

- Visual schedules
- Visual aids
- Seating arrangements

8.9 Appendix 9: Reflective Diary Extract's

08/02/24

Today, I conducted an interview with a teacher who has extensive experience working with pupils diagnosed with ADHD. Reflecting on the session, I realise I need to improve my listening skills. I often found myself eager to fill the silence or move to the next question too quickly. For future interviews, I should allow more time for the participant to think and respond, especially when discussing complex strategies for academic instruction and behaviour management. It is crucial to create space for them to fully express their thoughts and experiences without feeling rushed. This will help me gather more detailed and nuanced insights

10/02/24

After reviewing the transcript of my second interview, I initially noted the participant's reliance on visual schedules to support pupils with ADHD. My first interpretation was that the teacher heavily depended on these tools. However, upon a second review, I noticed the participant also emphasised the importance of individual praise and structured classroom environments, which I had overlooked. This experience taught me the importance of revisiting transcripts to capture the full scope of the participants' responses. Moving forward, I will make it a point to review each transcript multiple times to ensure an in-depth understanding of the strategies employed and the underlying reasons for their use.

12/05/24

Today, I completed an interview with a teacher who mentioned using emotion thermometers to help pupils with ADHD self-regulate. Initially, I was sceptical about the effectiveness of this strategy. However, the teacher provided detailed examples of how this tool helps pupils recognise and manage their emotions, which changed my perspective. Reflecting on this, I realise the importance of approaching each interview with an open mind and not letting my preconceptions influence my understanding. For future interviews, I will ensure I remain neutral and fully consider the teacher's explanations and experiences before forming any judgments. This approach will allow me to gather a more balanced and accurate understanding of the various strategies used in classrooms

8.10 Appendix 10: Participant Information

Participant	Years of Teaching	Class level	Gender	School
1	6 years	Senior infants	Female	Rural Munster School
2	5 years	First/Second class	Male	Rural Munster School
3	6 years	Second class	Female	Rural Munster School
4	12 years	Third class	Female	Rural Munster School
5	10 years	Fourth class	Female	Rural Munster School