



**TEACHER SUPPORT FOR STUDENTS WITH ATTENTION DEFICIT  
HYPERACTIVITY DISORDER IN A SPECIAL NEEDS SCHOOL**

**BY**

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## DECLARATION

I, Nhlakanipho Khumalo, at this moment declare that this dissertation and its contents are my original work. In cases where I have made use of other people's work, acknowledgement has been made. I further declare that this work has not been submitted to any other university or institution for any other qualification.

Signature: \_\_\_\_\_



Date: 27 March 2024

## **ABSTRACT**

Students with Attention Deficit Hyperactivity Disorder (ADHD) often experience academic and social problems at school because of their behaviour. The teacher becomes the main figure who can help students with ADHD in the school through the implementation of different support strategies to make teaching and learning easy for a student with ADHD in a special needs classroom.

The study aimed to explore Teacher Support for Students with Attention Deficit Hyperactivity Disorder in a Special Needs School. The study was conducted in a special needs school in Kwamashu, Durban. Six participants were selected purposely for this study. Pseudonyms were used in this report to protect the identities of the participants and the school. This study employed the qualitative approach and an interpretivist paradigm, as it was grounded in the world of lived experiences. Data was produced using interviews and observation. The study was based on Urie Bronfenbrenner's Ecological Systems Theory, offering valuable insights into child development and the crucial role teachers play in supporting students with ADHD to facilitate effective teaching and learning. Collaborating with the community and parents, teachers help children succeed in school by building a strong foundation through ecological systems. According to the data collected from the participants, it was evident that some teachers possess a strong understanding of ADHD support strategies, while others lack this knowledge. This disparity poses a significant challenge for teachers when it comes to providing adequate support to students in special needs classrooms.

Based on the data, it was found that certain teachers did not receive adequate training on ADHD and support strategies for students with ADHD during their university education. This lack of detailed coverage of ADHD in the curriculum has resulted in teachers being less proficient in developing intervention support strategies for ADHD students. There is a need for teachers to receive more training on ADHD support strategies to be able to support their students in their classrooms. The government can also play a major role by providing special needs teachers with workshops to educate them more about support strategies.

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## **DEDICATION**

This thesis is dedicated to my dear, loving mothers, the late Nonhlanhla Princess Khanyile and Tholakele Thandazile Khanyile.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ADHD</b>	Attention Deficit Hyperactivity Disorder
<b>CRP</b>	Culturally Responsive Pedagogy
<b>DoE</b>	Department of Basic Education
<b>DSM 5</b>	Diagnostic and Statistical Manual of Mental Disorders, 5 <sup>th</sup> Edition
<b>LSEN</b>	Learners with special educational needs
<b>SGB</b>	School Governing Body
<b>UKZN</b>	University of KwaZulu-Natal

# **CHAPTER 1: BACKGROUND AND INTRODUCTION TO THE STUDY**

## **1.1 Introduction**

Most of the child's time is spent in school, where they also interact with their teachers. Teachers are essential to a child's education. Implementing an intervention in the classroom may fall under the teacher's purview if a child is identified as having Attention Deficit Hyperactivity Disorder (ADHD) and a treatment plan is formed. As a result, teachers are better equipped to construct teaching and learning tactics as well as appropriate and efficient behaviour management strategies if they are aware of their students' requirements (Geng, 2011). Even though children with ADHD may face challenges in the classroom, they can benefit greatly from a teacher who understands their needs and tailors lesson plans to suit them (Geng, 2011). Due to this, this research project sought to determine the knowledge teachers in special education (LSEN) settings have of support techniques for ADHD students.

## **1.2 Location of the study**

The study was carried out in a special needs school with African students and teachers in KwaMashu, Durban. To safeguard participants' identity, pseudonyms have been used. Ecaleni Special Needs School is in a historical urban setting, and most of its students come from low-income homes. The researcher will interact with the teachers at that school, and they revealed that they have been worried about support tactics for ADHD learners for a very long period and have found difficulties in helping students in their classrooms owing to a lack of understanding of ADHD and its support mechanisms. This led me to decide to do my research at this institution.

There is just a single school catering to special needs in KwaMashu. KwaMashu is divided into several sections, ranging from sections A to K. All students from every section are welcomed by the school, leading to a significant population of students from underprivileged backgrounds. The students' parents live in various provinces or different locations. Many reside with their grandparents and other family members, leading to a lack of necessary support for some. Typically, grandparents may lack knowledge or education on how to support ADHD adolescents, posing a considerable challenge.

There are 330 students at Ecaleni Special Needs School, and 80 per cent of them come from low-income households. To elaborate, there are 25 full-time teachers at the institution. The principal oversees the school and supervises three departmental heads: foundation, intermediate, and senior phases. The school provides classes for students in grades 1 to 5 with seven foundation phase classes, eight intermediate phase classes, and seven senior phase classes with twelve to fifteen students each. The school has two autism classes for autistic students, and there are eight students in each class and a teacher.

Although the school has few resources, they still accept students from places where unemployment and poverty are pervasive. The school provides its special needs students with 80% practical skill training and 20% curriculum. The school has been successful throughout the years by teaching students practical skills like plumbing, woodwork, mat making, and baking. Once the students master all these abilities, the school awards credentials in their final year to help them get employment at the bigger supermarket to work in the bakery, whilst some individuals can develop their gardens to grow vegetables and fruits to sell in the neighbourhood.

### **1.3 Problem statement**

The insufficient support and resources available to educators in special needs schools who work with students with Attention Deficit Hyperactivity Disorder (ADHD) is a critical concern that requires attention. Teachers frequently face difficulties in addressing the specific requirements of these individuals, resulting in academic and behavioural difficulties within the classroom. This research seeks to investigate the unique difficulties that teachers encounter when offering assistance to individuals with ADHD in special needs schools. The goal is to uncover successful strategies that can enhance teacher support and ultimately improve student outcomes. Teachers often struggle with a significant obstacle: the limited availability of training and professional development programs that specifically address ADHD. Numerous educators struggle to effectively handle the distinct needs and behaviours of individuals with ADHD, leading to feelings of frustration and burnout. In addition, the lack of sufficient resources for these individuals, including specialised educational materials and support staff, only adds to the difficulties experienced by educators. It is essential to tackle these concerns to establish a nurturing and all-encompassing educational atmosphere for individuals with ADHD in special needs schools. Equipping educators with specialised training and continuous professional development in strategies for managing ADHD can significantly enhance their capacity to assist students grappling with this condition. By providing teachers with the

essential knowledge and skills, they will be more equipped to meet the unique needs of students with ADHD and foster a more positive learning environment for all. Furthermore, by enhancing resources and providing support for individuals with ADHD, including access to specialised materials and additional staff members, it is possible to lessen the workload on teachers and ultimately enhance the academic achievements of these individuals. In order to foster a more inclusive and successful learning environment for all students in special needs schools, it is crucial to prioritise training, resources, and support for teachers who work with students with ADHD.

#### **1.4 Purpose of study**

The purpose of this study was to explore teachers' knowledge regarding support strategies for students with Attention Deficit Hyperactivity Disorder (ADHD) in a special needs school. McDougal, Tai, Stewart, Booth, & Rhodes (2022) stated that studies that were conducted before 2022 show that teachers have less knowledge regarding ADHD, whilst some are well-equipped with knowledge (Ewe, 2019), which makes it very difficult for those with less knowledge to support students with ADHD in their classrooms (Latouche & Gascoigne, 2019). Being able to deal with ADHD in special education is very important as it will assist teachers to develop curriculum to suit each learner, this can be achieved by teachers who attend workshops.

Espie (2021) stated that cognitive behavioural techniques play a major role in supporting an ADHD student. This study will assist teachers with various methods that could be implemented to support their students in the classroom. Since there is less literature published in South African special education on ADHD, there is a huge gap in the teachers' support for ADHD in special education classrooms (Ewe, 2019), which can be addressed to help add to the existing knowledge in South African teachers' support strategies.

#### **1.5 Rationale**

For the past three years, I have been educating grade 5 students at a special needs school in Gauteng province. Throughout this time frame, I have observed teachers facing challenges when instructing students with ADHD. Teachers become frustrated and struggle to manage or discipline these types of students. Teachers require additional time and patience to effectively teach students with ADHD due to the limited time allocated per period. According to Ward,

Bristow, Kovshoff, Cortese & Kreppner (2022), the school curriculum does not involve or support students with ADHD, and they are given the same treatment, making it difficult for teachers to teach students with ADHD as they are not well-trained to work with such students. Furthermore, as I was conducting interviews in my school, I realised that most teachers are not equipped with the knowledge and skills to work with ADHD students. I found out that all this was caused by a lack of training at the university level as well as the Department of Education not providing teachers with the necessary preparation and workshops to develop them regarding supporting ADHD students in special needs classrooms.

I come from a big family; my mother had a child who had ADHD, which was quite challenging for my parents because they did not know how to treat or support my brother. My parents always believed that my brother was misbehaving at school and home; they did not realize that ADHD is real after countless meetings at my brother's school due to his behaviour, which led to a meeting with a psychologist and getting a right diagnosis, this made it easier for my parents to assist him. Having a brother with ADHD contributed to my knowledge and understanding of the disability; it was easier for me to support students in my classroom.

Mohr-Jensen, Steen-Jensen, Bang-Schnack, & Thingvad (2019) state that previous research on teachers' ADHD knowledge is mixed; findings of some studies suggested that teachers have good knowledge of ADHD while others are less knowledgeable, which indicates that teachers need more training in supporting students with ADHD. Supena & Kusmawati (2022) explained that the curriculum taught at university does not cover ADHD in detail, and it only highlights a few points about ADHD, which contributes a lot to teachers lacking knowledge about ADHD. As a result, there is a need to improve their knowledge by attending training and workshops to help them gain knowledge on how to support ADHD students in special needs schools (Latouche & Gascoigne, 2019).

Based on the literature mentioned above, a noticeable gap exists in previous research. The published studies mainly originate from Australia, Canada, and America, with limited research focusing on support strategies for ADHD in special needs classrooms within the South African context. This study is relevant as it aims to explore teachers' knowledge of support strategies for ADHD learners in special needs classrooms.

## **1.6 Study Significance**

Teachers are the key players in children's education; they create an inclusive environment and develop intervention support to suit each student in the classroom. According to Barkley, DuPaul & McMurray (1990), teachers often lack the knowledge and skills to develop and implement effective classroom intervention, which may lead to negative implications, especially for children with ADHD (Gaastra, Groen, Tucha, & Tucha, 2016). They must be fully informed on how to interact and talk to children with ADHD to prevent negative outcomes. There is limited research on teacher support methods for students with ADHD in special needs schools. This study could potentially lead to future recommendations for support strategies for children with ADHD in special schools.

This study was an attempt to explore support techniques for the teachers of special needs schools, hoping that the study contributes to the development of various support strategies. The study might be significant to policymakers to raise awareness of the importance of developing different support strategies for ADHD in special needs schools. Most of the published support strategies are for ADHD students in mainstream schools, leading to less support for strategies that focus on a learner in a special needs school, and this becomes a challenge to a teacher in a special needs school who teaches learners with two disabilities.

Katz (2012) highlighted the significance of offering assistance and direction to students with ADHD. The better equipped you are at recognising and supporting students with ADHD, the greater the chance of unlocking their academic capabilities and fostering positive classroom conduct. The study will assist teachers in special needs schools in implementing various support strategies in their classrooms. Since students in special needs schools suffer from severe intellectual disabilities, with proper support for students with ADHD, teaching and learning can be easier. The findings of this study will also encourage teachers of special needs schools to research, attend workshops, and further their studies.

## **1.7 Aim of the study**

This study aims to explore the various forms of teacher support available for students with Attention Deficit Hyperactivity Disorder (ADHD) in a special needs school setting.

## **1.8 Objectives**

The objectives of this study were:

1. To determine the knowledge teachers in special education (LSEN) settings have of support techniques for ADHD students.

2. To investigate the methods that teachers believe can best serve a student who has Attention Deficit Hyperactivity Disorder (ADHD).
3. To determine whether students with Attention Deficit Hyperactivity Disorder (ADHD) need support in the classroom.

### **1.9 Research questions.**

The following research questions guided the study:

1. What do teachers know about support techniques for special education students with Attention Deficit Hyperactivity Disorder (ADHD)?
2. What methods do teachers believe can best serve a student who has ADHD?
3. How do students with Attention Deficit Hyperactivity Disorder (ADHD) need support in the classroom?

### **1.10 The focus of the study**

The study "Teacher Support for Students with Attention Deficit Hyperactivity Disorder in a Special Needs School" focused on the various methods employed by teachers to assist students with ADHD in a special needs school environment. The study aimed to investigate the strategies and interventions employed by educators to support the academic and social success of these individuals. Through an examination of the distinct obstacles encountered by individuals with ADHD in an academic setting and the invaluable guidance provided by their educators, the researchers aimed to uncover effective strategies that could be adopted in similar educational institutions catering to students with special needs.

### **1.11 Theoretical Framework**

The ecological systems theory, which American psychologist Urie Bronfenbrenner created in the 1970s, served as the theoretical foundation for this investigation. This theory's major goal is to clarify how social contexts impact children's development. This idea highlights the value of researching children in various ecological systems, also known as habitats, to comprehend their development. As per Bronfenbrenner (1977), a child's surroundings consist of a network of interconnected systems. He organised them based on their influence on children. He named these formations the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The five systems are interconnected, so how each one affects the development of a child relies on how it interacts with the others.

## **1.12 Methodology**

This was a qualitative study as it aimed to explore teachers' knowledge regarding support strategies for students with ADHD in a special needs school. According to Ahmad (2019), qualitative research is multimethod in focus, involving an explanatory, realistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, trying to make sense of or interpret phenomena in terms of the meanings people bring to them. Wilson, Mura, Sharif & Wijesinghe (2020) explained that qualitative research involves the studied use and collection of a variety of empirical materials – case studies, personal experiences, introspective, life story, interviews, observational, historical, interactional, and visual texts that describe routine and problematic moments and meanings in individuals' lives. Hence, a qualitative approach was useful in this study as it aimed to discover teachers' knowledge on support strategies for students with Attention Deficit Hyperactivity Disorder (ADHD) in a special needs classroom.

### **1.12.1 Paradigm**

To conduct this study, I made use of the interpretivist paradigm. It is suggested by Cohen & Manion (1994) that interpretivist research methodologies aim to comprehend "the world of human experience" and that "reality is socially constructed" (Mertens, 2007, p. 12). In this instance, we are interested in learning about the tactics teachers in a special needs school use to support students with ADHD.

### **1.12.2 Participants**

Kalu (2019) asserts that sampling entails participant selection and choosing, as well as the environments in which research will be carried out. I did my research utilising purposive sampling, with a sample size of six special needs teachers. Choosing specific participants and locations is a key aspect of purposive sampling (Bertram & Christiansen, 2014). Along with purposive sampling, the study used convenience sampling, which refers to selecting participants based on their ease of accessibility (Bertram & Christiansen, 2014). Having teachers at one school made it more affordable to conduct research there rather than having to travel to another location.

### **1.12.3 Data production techniques**

Selecting data methods that are "most effective in obtaining the information they need to answer the questions they need to answer in their research" is crucial for any research project

(Bertram & Christiansen, 2014, p.72). In this study, the research material was generated using the following data methods.

1. A Semi-structured interview for 15-20 minutes, which included answering three research questions on teacher support strategies.

- I. What do teachers know about support techniques for special education students with Attention Deficit Hyperactivity Disorder (ADHD)?
- II. What methods do teachers believe can best serve a student who has ADHD?
- III. Do students with Attention Deficit Hyperactivity Disorder (ADHD) need support in the classroom?

2. 20 minutes were spent in the classroom doing structured observation for each participant. It has been observed that teachers provide support to students with ADHD through a range of strategies.

3. A questionnaire was based on the teacher's knowledge of support strategies for students with ADHD disorder.

#### **1.12.4 Research design.**

According to Bertram & Christiansen (2014), a research design is a systematic plan of how a researcher will generate and analyze data to answer the research questions. The style of research that was appropriate for this study was a case study that was most appropriate for this study. According to Thomas (2021), a case study is a systematic and in-depth study of one case in its context. The use of a case study was to get in-depth knowledge of support strategies used by teachers in special needs schools.

#### **1.9.5 Data analysis**

Thematic analysis was used to analyse the data for this investigation. Thematic analysis, according to Braun & Clarke (2019), is a technique for analysing qualitative data that entails looking over a data generation to find, examine, and summarise recurring patterns. It is a technique for reciting data, but in the process of choosing codes and developing themes, interpretation is also involved.

### **1.13 Overview of a research project**

#### Chapter One-Background and introduction to the study

This chapter gives a summary of all the aspects that the research entails. This includes the background of the study, purpose, and rationale of the study. Key research questions that the study intended to answer.

#### Chapter Two-Literature review

This Chapter discusses the literature on “Teacher support for students with Attention Deficit Hyperactivity Disorder (ADHD) in a Special Needs School”.

#### Chapter Three- Theoretical/Conceptual framework

This chapter discusses the theoretical framework, outlining the core elements and discusses how the framework was related to this study.

#### Chapter Four- Methodology

This chapter discusses the methodology that was used to generate data for this research.

#### Chapter Five- Data presentation, analysis, and discussion of the findings

Analyses the data and discusses the data in light of the chosen theoretical framework and relevant literature. The data is presented under key themes which emerged from the data generated by participants.

#### Chapter Six-Concluding discussions and recommendations

A summary of the key findings is presented, and a conclusion of the overall research is discussed.

### **1.14 Chapter Conclusion**

The setting and history of the study have been covered in this chapter. It put the study's aims and important questions front and centre and highlighted those goals. In the chapter that follows, current research on teacher support for students with attention deficit hyperactivity disorder in a special needs school will be reviewed, considering recent discoveries.



## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

This chapter reviews current literature on teacher support for students with attention deficit hyperactivity disorder (ADHD) in a special school. Additionally, it provides information on ADHD that includes its origin, development, challenges caused by ADHD in the classroom as well as support strategies for students with ADHD”.

“Not to give up on students with ADHD, but rather to be prepared for them.”(Lee & Witruk, 2016)

According to Jung & Choi (2010) (as cited in Lee and Witruk, 2016), for all students, the classroom serves as a crucial context, and teachers must handle students with various demands there. For students in special education with attention-deficit/hyperactivity disorder (ADHD), effective classroom assistance measures must be used (Lee & Witruk, 2016). Hedin, Mason & Gaffney (2011) stated that the success of ADHD students in special education largely depends on how teachers manage their challenging behaviours. As a result, teachers must be able to manage and support each student's personal, emotional, and social needs (Arcia, Frank, Sanchez-LaCay & Fernández, 2000). This can positively impact students with ADHD's future success (Ohan, Cormier, Hepp, Visser & Strain, 2008).

According to statistics from South Africa's DBE, (2015) (as cited in Motala, 2015), 121 461 students with disabilities were enrolled in regular classrooms. There were 119 559 students registered in special schools in the same year. Of those students, 13 170 (11.015%) had SLD, while 3116 (0.26%) had ADHD (EMIS, 2016). This makes it quite evident that teachers play a crucial role in supporting ADHD students in their classrooms. Research suggests that the behaviours of teachers and students can impact children with ADHD in terms of academic and behavioural outcomes (Baumgaertel, Wolraich & Dietrich, 1995, as cited in Kazda, Bell, Thomas, McGeechan, Sims & Barratt, 2021). One of the key factors is the teacher's understanding of ADHD, their awareness of a student's challenges, familiarity with interventions, and the effectiveness of the remedies, all of which can impact the success of treatment (Vereb & DiPern, 2004, as cited in McIntyre, Baker, & Overstreet, 2019).

Unfortunately, teachers frequently lack the expertise needed to design and implement successful classroom interventions (Barkley, DuPaul & McMurray, 1996, as cited in Leitner, 2014). This ignorance may have unfavourable effects. The ability to create and administer

successful therapies for children with ADHD may be lacking in teachers (Geng, 2011). To avoid any unfavourable effects, it is crucial to ensure they know how to interact and communicate with children with ADHD. There is a lack of research on how teachers' understanding of ADHD, intervention approaches, experience, and tolerance of ADHD behaviours in the classroom impact their ability to effectively support students with ADHD (Sherman, Rasmussen & Baydala 2008, as cited in Brownlee, Chalkidou, Doust, Elshaug, Glasziou, Heath & Korenstein, 2017).

Katz (2012) argued that the better you are at identifying and assisting students with ADHD, the more likely they are to reach their academic potential and display positive classroom behaviour. According to the Centre for ADHD Awareness Canada (2017), as cited in Lasko (2020), every classroom will have between one and three students with ADHD; these students run the risk of having poorer academic achievement levels and increased rates of disciplinary referrals. Students with ADHD are 2.7 times more likely than those without the condition, which contributes to the challenge of maintaining positive student-teacher relationships (Centre for ADHD Awareness Canada, 2017, as cited in Lasko, 2020). While continuing to instruct the entire class, teachers need to understand how to assist a greater number of students with ADHD in their classrooms (Medoff, 2016).

According to Dendy (2019) (as cited in Lasko, 2020), once teachers create support strategies to demonstrate to learners with ADHD that they are gifted and worthwhile, the students believe it, and outcomes will follow. According to Medoff (2016), teachers must always ask students with ADHD what they need for them to be the best support in helping a teacher build a good learning environment. Special needs teachers can utilise various strategies to assist a student with ADHD, but establishing a solid connection with the students is essential for the success of these tactics (Knowles, 2010). Schools might not be a good fit for students with ADHD, so teachers must pay attention to these students and reassure them that they will help them learn new skills and information while also letting them know how much they are loved and cared for (Sol, 2020). To make teaching and learning easier, schools must provide their teachers with the training and assistance they need to deal with these students and develop relationships with them (Knowles, 2010).

## **2.2 Definition Of Teacher Support**

Klem & Connell (2004) stated that teachers encourage students by motivating them and spending time with them, but also by establishing expectations for them, treating them equally, and allowing them to make their own decisions.

### **2.2.1 Types Of Teacher Support**

Studies frequently focus on academic help and emotional support provided by teachers to students (Ansong, Okamu, Bowen, Walker & Eisensmith, 2017). Academic support refers to a range of tools that can help students succeed academically and in school, including those that are interpersonal, emotional, cognitive, behavioural, and instrumental (Chen, 2005). Its main goal is to assist students in enhancing their academic learning process through various teaching strategies, educational services, and educational resources (Abbot, 2014, as cited in McGregor, 2022).

The offering of care, empathy, affection, and trust is referred to as emotional support, which is a subtype of social support (Langford, Bowsher, Maloney & Lillis, 1997). According to a study by Lynch & Cicchetti (1992), doing so can help one feel as though they are part of a network of people who owe one another a debt of gratitude (Cobb, 1976). Emphasising the positive effects on various educational accomplishments, providing emotional support is crucial for children's mental health and emotional well-being (Luthar, Cicchetti & Becker 2000). According to Osterman (2002), supportive relationships and a sense of belonging are linked to academic motivation, engagement, and performance. Particularly for students who struggle in their personal and academic lives, feeling known and loved by one adult in the classroom is crucial for learning (Protheroe, 2007). For students to develop their strengths, emotional support involves counselling, adding self-esteem-boosting activities, and showing the student care and attention (Kos, 2004).

According to the DETE (1999), teachers should aim to capitalise on the strengths of students with ADHD. Kos (2004) identified this tactic as emotional support (i.e., demonstrating the student's concern and attention. In a study conducted by Kos & Murray (2010), it was stated that teachers believe emotional support to be valuable and effective. Moreover, they hold a positive view of this strategy.

### **2.2.2 Teacher Support and Educational Outcomes**

It is well-recognised that improved academic performance from the foundation phase to the senior phase is directly correlated with long-term supportive teacher-student relationships (Siraj-Blatchford, Taggart, Sammons, Melhuish & Sylva, 2013). A favourable relationship

with teachers is a powerful predictor of school adjustment, engagement, and motivation, even though children's views of positive teacher-student relationships decline as children become older (Woolfolk, 2010).

### **2.3 Definition of ADHD**

According to Matthews (2003), attention deficit hyperactivity disorder (ADHD) is a group of chronic neurological illnesses that affect a child's capacity to control their level of activity, limit their behaviour, and pay attention to their tasks in a developmentally appropriate way. Similarly, Rief (2015) stated that ADHD is a genetically transmitted condition that a chemical imbalance or deficiency in the brain may cause. ADHD is defined as “a brain-based disorder that stems from variations in the central nervous system” (Rief, 2003, p. 3). The US Department of Education (2006) stated that children with ADHD frequently suffer from a range of behaviours, including poor attention skills, high impulsivity, and conduct linked to their impulsivity.

Additionally, ADHD can make it more difficult for a child to succeed academically, behaviourally, or socially (Buchanan & LeMoyné, 2020). A persistent pattern of inattention, impulsivity, and hyperactivity that is more frequent and severe than the behaviours generally seen in a person at a comparable level of development characterises children with ADHD (Salend & Rohena, 2003). These traits are chronic and are seen to continue for at least six months beginning in early childhood, typically before the age of seven (Salend & Rohena, 2003). Additionally, the child exhibits similar symptoms in every setting in which they function.

### **2.4 History Of ADHD**

Although ADHD is not a recent issue, it affects children and is linked to a hyperactive personality (Climie & Mitchell, 2017). According to experts, ADHD has undergone many alterations throughout its history, reflecting various opinions on its traits. Heinrich Hoffman first proposed the idea of ADHD in 1845 and included it in a book named "Children's Stories." According to Heinrich Hoffman, children who exhibit extreme hyperactivity in their regular daily activities are those who have ADHD (Buchanan and LeMoyné, 2020). Aside from Hoffman, another school of thought holds that the person who started ADHD was a doctor from England named George F. Still, who noted that someone with ADHD had an

extraordinary inability to focus, was restless, and restless. George F. Still also revealed that a person with ADHD has a profound lack of willpower due to biological heritage. The disorder would be caused by childhood trauma, making it an intrinsic illness (Chaimaha, Sriphetcharawut, Lersilp & Chinchai (2017). Other theories indicated that ADHD was caused by an encephalitis outbreak or brain inflammation, with the idea spreading around the world from 1917 to 1926 (Sibley, 2021).

Individuals who have the condition and are still living may face a range of significant challenges concerning behaviour, irritability, attention span, and hyperactivity. Brain disease can be linked to birth trauma, specific brain region lesions, poisoning, or other conditions known as "brain-injured child syndrome," sometimes connected with the term "mental retardation." Since the 1950s, hyperkinesia - the inadequate filtering of impulses entering a person's brain—has been associated with ADHD in children. As a result, the main characteristic of someone with ADHD is hyperactivity or excessive movement (Sibley, 2021).

## **2.5 Causes of ADHD.**

According to Barkley (1997), ADHD is typically thought of as an issue with attention that results from the brain's inability to distinguish between conflicting sensory inputs like sound and sight. However, recent studies have demonstrated that children with ADHD do not struggle in that area. Experts generally agree that children with ADHD struggle to manage their impulsive motor responses to stimuli (Barkley, 1998). Although scientific and technological developments in the areas of genetics and neurological imaging techniques promise to shed light on this matter shortly, it is still unknown what the direct and immediate causes of ADHD are. Despite acknowledging the impact of a child's environment on behaviours, the majority of researchers attribute ADHD more to hereditary or biological factors than environmental influences (Barkley, 1997).

The malfunctioning of some brain regions in people with ADHD may be the cause of the symptoms of the disorder, according to imaging studies undertaken over the past ten years (Barkley, 1998). Children with ADHD have considerably reduced right prefrontal cortex (part of the cerebellum) and at least two of the basal ganglia, which are groups of nerve cells. This was discovered in a 1996 study at the National Institutes of Mental Health (NIMH). These brain regions appear to be involved in the control of attention (Barkley, 1998).

Researchers believe mutations in various genes that are active in the prefrontal cortex and basal ganglia may play a substantial role in explaining why these portions of certain children's brains are smaller (Barkley, 1998). Additionally, several non-genetic variables, such as early delivery, maternal alcohol and cigarette use, high lead exposure, and prenatal brain injury, have been related to ADHD (Neuwirth, 1994). There is inconclusive evidence to support some people's claims that food additives, sugar, yeast, or ineffective child-rearing practices cause ADHD. (Barkley, 1998).

## **2.6 Diagnostic Criteria**

ADHD is defined in the most recent Diagnostic and Statistical Manual of Mental Disorders—Fifth Edition (DSM-5; APA, 2013) as a persistent pattern of inattention and hyperactivity that results in performance issues in social, educational, and work settings. ADHD symptoms include but are not limited to problems focusing, distractibility, forgetfulness, excessive chatting, interrupting or intruding on others, and difficulties participating in leisure activities quietly. Diagnosis necessitates the presence of symptoms in more than one environment (e.g., home, school, and work) (APA, 2013). Although such symptoms first manifest in childhood, they can persist into adolescence and age, resulting in significant impairment in social and vocational functioning. The modern view of ADHD involves two different, yet significantly associated, behavioural characteristics underpinning the numerous symptoms thought to characterize the disorder: (a) inattention and (b) hyperactive-impulsive conduct (Nigg & Barkley, 2014).

Diagnosis usually entails assessing these two sets of basic symptoms and deciding whether the condition is primarily caused by one or both of them. That is, the core symptoms can appear distinct, such that a person with ADHD has primarily one set of behavioural symptomatology (e.g., inattention) and not the other (e.g., hyperactive-impulsive behaviour) or a combination of both (e.g., inattention and hyperactive-impulsive behaviour).

## **2.7 ADHD Symptoms**

### **2.7.1 Inattention**

Individuals with ADHD have the most difficulties sustaining attention or persisting at tasks while resisting distractions (Nigg & Barkley, 2014). Failure to maintain attention typically results in a slew of complaints from parents, teachers, and even co-workers, who frequently

state that the individual is easily distracted, does not listen, and is unable to concentrate (Fischer, Barkley, Smallish & Fletcher, 2005). According to Borger and van der Meere (2000), inattention research has corroborated such complaints through increased off-task behaviour, less persistence in performing tedious functions, and a lower likelihood of returning to an activity once distracted. Behaviours are not observed in those with other disabilities or psychiatric conditions (Swaab-Barneveld, 2000).

In a general sense, APA (2013) highlighted that ADHD inattention is characterised by behaviours such as being easily distracted by external stimuli, not paying close attention to details, making careless mistakes in school or work, struggling to sustain attention during lectures or long readings, seeming not to listen when spoken to directly, having trouble following through with instructions and finishing assignments, and finding it challenging to organise tasks (as illustrated by the example). Many people often misinterpret the challenges faced by individuals with ADHD in maintaining focus and completing tasks, labelling it as laziness, irresponsibility, or lack of cooperation (APA, 2013, p. 63).

Such public attitudes can jeopardise the mental and physical health of people with ADHD when they dispute the legitimacy of their illnesses and, as a result, do not seek treatment, rehabilitation, or workplace accommodations. Individuals with ADHD are also stigmatised, and they may learn compensatory measures to disguise their challenges. Still, they suffer from the stress and constant effort of maintaining a socially acceptable appearance (APA, 2013).

### **2.7.2 Hyperactive-Impulsive Behaviour**

Another behavioural issue that individuals with ADHD may experience is difficulty controlling impulses. In essence, individuals with ADHD may struggle to stop an activity once they have chosen to participate in it (APA, 2013). Due to this inability, individuals with ADHD may frequently move around, even at inappropriate moments, or make quick, impulsive "at the moment" decisions that could lead to negative consequences. As puberty or adulthood nears, signs of hyperactivity may appear as restlessness rather than excessive, uncontrollable actions (Nigg & Barkley, 2014). Impulsivity, on the other hand, appears to remain raised throughout time but is frequently manifested as poor decision-making/problem-solving (Fischer et al., 2005). Cooper et al. (2014) explained that frequent fidgeting, hand tapping, or inability to sit still; leaving seats in the classroom or workplace situations when expected to remain in place; feeling restless; frequent inability to engage in play or leisure activities quietly; inability or discomfort with remaining still for extended periods, such as in restaurants or lengthy work meetings; talking excessively; difficulty waiting; blurting out.

According to Cortese et al. (2020), hyperactivity-impulsivity in ADHD can be viewed as a heightened valuation of a reward rather than a pure inability to stop activities. That is, the idea of receiving an immediate reward (e.g., R25 now) has a greater influence than the idea of earning a delayed reward (e.g., R200 in a week). Behavioural patterns in such a system tend to be more impulsive (Sagvolden et al., 2005).

## **2.8 ADHD in the Context of Inclusive Education in South Africa**

Various governmental initiatives have been implemented to advance equality since the establishment of democracy in South Africa in 1994. The Education White Paper 6 (Department of Education, 2001), outlining a framework for inclusive education, could be considered a crucial policy in the current study. Ensuring inclusive education aims to address the diverse needs of all learners facing challenges in their learning journey (Dalton, McKenzie & Kahonde, 2012). Since inclusive education has been established, students with learning disabilities are frequently enrolled in regular schools. As a result, teachers in the mainstream are being forced to teach classes with a variety of learning requirements (Slobodin, 2023).

According to Holtz & Lessing (2002), every South African classroom contains at least one student who has ADHD. Teachers must use a learner-centred pedagogical approach to successfully integrate ADHD-affected students into regular classes (Prosser, 2008). This entails (a) customising instructional strategies to meet each student's needs best, (b) differentiating curricula in terms of pacing and sequencing, and (c) putting effective therapies into practice to best serve students with ADHD (Naiker, 2007). The core of inclusive education is learner-centred pedagogies, which place the individual learner's experience at the centre of the learning process.

## **2.9 Challenges of ADHD in a Special Needs Classroom**

The existence of ADHD can significantly impair a child's capacity for attention, impulse, and behavioural control; these deficiencies can cause issues for a child in a variety of areas throughout their academic career (Rapport, Chung, Shore, & Isaacs, 2001). According to the staff of the American Academy of Pediatrics (as cited in Reiff, 2004), "In general, behaviour management and academic progress present the greatest challenges for children with ADHD."

### **2.9.1 Behavioural Issues**

At the elementary school level, children diagnosed with ADHD are primarily highly impulsive in their classroom actions; they blurt out and are unable to wait for their turn (Nijhuis et al., 2008). These children are said to “lack self-control and regulatory behaviour, have a high activity level, trouble sitting [still], and are constantly touching or playing with nearby objects” (Rief, 1996, p. 176). Children with ADHD are frequently distracted, and in addition to finding it challenging to begin activities, they also have trouble staying on task and finishing homework assignments (Pelham, Foster & Robb, 2007). Without constant prompting and refocusing, it is challenging for young children to maintain attention and effort. Children with ADHD also frequently exhibit other traits, such as being quickly bored, being disorganised, and having trouble writing (Rief, 1996).

### **2.9.2 Academic Concerns**

Children with ADHD often face challenges in meeting the academic requirements of the classroom, as behaviour management issues tend to arise as a primary concern in the educational setting. (Reiff, 2004). Not all ADHD patients display the impulsiveness and hyperactivity that make classroom behaviour management difficult. Some of the children who have been diagnosed with ADHD have the disorder's mostly inattentive type. In general, children with the inattentive form of ADHD behave far less disruptively and have fewer disciplinary issues at school (Warnes et al., 2022).

Nevertheless, these children encounter their most significant obstacles in the academic domain. While their impulsive and hyperactive peers also suffer academically, behavioural problems are what cause them to struggle. Inattentive children often face academic challenges due to their tendency to get easily distracted, difficulty initiating and completing tasks, and inability to sustain focus until tasks are completed (Rief, 1996).

Several common ADHD traits can hinder a student's ability to effectively study in a traditional classroom setting (Reiff, 2004). Initially, a child's tendency to get distracted and lack of persistence could hinder their ability to retain information taught in class. Additionally, impulsivity, often associated with ADHD in children, can cause a student to rush through their school assignments and answer questions quickly without taking the time to think through their responses. Furthermore, numerous students struggle with organisational and planning skills needed to meet deadlines, along with note-taking capabilities and completing class assignments (Rief, 2015).

## **2.10 Support Strategies/Intervention for ADHD Students in a Special Needs Classroom**

Numerous factors and modifications to the teacher's teaching style are necessary for the ADHD student to succeed in the classroom (Rief, 1996). To ensure academic success for a child with ADHD, a teacher typically needs to concentrate on three main areas.

Firstly, the teacher needs to establish a well-organized, structured, and consistent environment in a classroom with students who have ADHD (Rief, 1996). Lack of organisation and difficulty maintaining focus are common challenges for children with ADHD. For a student with ADHD, it is crucial to have a highly predictable routine in the classroom. Clear expectations, outlined procedures, and frequent prompts or reminders help them understand how work should be completed and what behavioural expectations are in place (Rief, 1996).

Secondly, to cater to the diverse strengths and intelligence levels in the classroom, lesson presentations and activities should focus on active learning and involving the senses (Rief, 1996). The course syllabus needs to be crafted to be unique and engaging. Students, whether they have learning impairments or not, often exhibit specific characteristics and interests that, when encouraged, support their learning and growth (Rief, 1993).

The third aspect of accommodation involves offering students choices (Rief, 1996). An individual with ADHD is often seen as lacking focus and attention during classes or when receiving information. When provided with options on how to absorb information and convey their knowledge, students can engage more actively in their learning. Students are likely to be more engaged and motivated to learn when they feel a sense of ownership and control over their projects.

The extent to which special and general education teachers implement these techniques has not been well documented. Reid, Maag, Vasa, and Wright (1994) found that more than half of special education teachers reported using behaviour modification, consultation, one-to-one teaching, and modified seating. Except for modified seating, special teachers were significantly more likely than general teachers to use these techniques.

## **2.11 Controversies Around ADHD**

### **2.11.1 Controversies Around ADHD Diagnosis**

The scientific community has experienced disagreement regarding several ADHD-related issues. The process of making a diagnosis is one topic of discussion. According to Silver

(1999), there are no official tests available to diagnose ADHD. Additionally, there are no neurological, laboratory, or physical signs of this condition. A child's or adolescent's level of hyperactivity, distractibility, or impulsivity can be determined using excellent psychological tests, rating scales, and computer-based examinations (Silver, 1999). Inattention, increased activity, impulsivity, or any combination of these symptoms, however, can be thought of as indications of a wide range of diseases, including sensory system issues, mental illness, as well as academic, psychological, and medical issues (Haber, 2003).

In addition, much stress causes much turbulence and ruin for children, including posttraumatic stress disorder (PTSD), divorce, death, and alcoholic parents (Shafer & Shafer, 2002). In other words, because their support networks are ineffective, the child gets angry and cannot follow orders, but that does not imply they should be diagnosed with ADHD. Moreover, it is suggested that the children may become hyperactive because of low blood sugar and dietary allergies. The symptoms of ADHD that are caused by all these issues are similar (Silver, 1999). Some experts suggested that ADHD and creativity may share the same aetiology. Impulsivity, motor hyperactivity, and inattention are common in creative children. They are also not valued by their teachers as highly as less creative, more conformist students.

As a result, the activities of creative kids may be perceived as unsuitable for school, and they may receive an inaccurate ADHD diagnosis. The experiences of creative people are replete with tales of difficulties in school as a child (Cramond, 1995). Therefore, it is crucial to understand the precise reason behind the symptoms. Several of the drugs and treatment methods used to treat one disorder may worsen another (Haber, 2003). For instance, Ritalin, Dexedrine, or Adderall (these drugs are typically the first-line stimulant medication for individuals with ADHD) will typically make the child more depressed, anxious, or angry if the child has ADHD and Depression, ADHD and Anxiety, ADHD and Anger, ADHD, and Manic Depression, or any combination of these conditions (Shapiro, 2002).

Many experts concur that ADHD frequently manifests as a combined disorder. Many psychiatric disorders co-occur with ADHD. According to Goldman, Genel, Bezman & Slanetz (1998), there is unmistakably a significant overlap between ADHD and several learning difficulties and behavioural disorders. Comorbidity makes the diagnostic process more complex and may affect the prognosis, natural history, and management of ADHD in children (Woods and Ploof, 1997, as cited in Shorena, 2006). As a result, the validity of ADHD as a

distinct syndrome is compromised by the lack of a single cause (Goldman, Genel, Bezman & Slanetz, 1998).

The National Institute of Mental Health (2000) stated that although there is no medication to treat ADHD, several psychostimulants (such as Ritalin, Pemoline, Adderall, etc.) can temporarily lessen its symptoms in people who have the disorder. These medications may lessen children's impulsivity, solve their behavioural and academic issues, and even improve their physical coordination (athletic prowess, penmanship). However, the duration of symptom alleviation lasts between three and nine hours, depending on the medication used, the dosage, and the patient's response (National Institute of Mental Health, 2000). McGinnis (1997) pointed out that there is no evidence to suggest that the use of Ritalin can lead to long-term behavioural or academic benefits in individuals with ADHD. Moreover, psychostimulants can have negative impacts and the risk of addiction (National Institute of Mental Health, 2000). Parents and numerous doctors are becoming increasingly worried about this trend.

According to McGinnis (1997), Ritalin is a chemical relative of methamphetamine and shares cocaine's pharmacological effects and addictive tendencies. Keirse (2002) claimed that parents are typically not informed that these stimulants, like sedatives and tranquillisers, are medicines that impair the brain. Some ADHD children who use psychostimulants have weight loss or decreased hunger, as well as momentarily slowed growth. Another negative consequence is difficulty falling asleep (Keirse, 2002).

The extensive discussions centre on the epidemiology of ADHD. In comparison to other countries, the United States has more cases of ADHD (Haber, 2003). The most common paediatric psychiatric disease in America is now ADHD. As many as four to five million children in the US are thought to experience some ADHD (Keirse, 2002). Furthermore, Americans use Ritalin five times more frequently than people do elsewhere (Haber, 2003). According to Dulcan & Martini (2000), this variation is likely the result of various diagnostic procedures and cultural expectations. As a result, this shows the need for a better diagnosis of ADHD as well as the need for a more thorough investigation of the illness in various populations (National Institute of Mental Health, 2000).

### **2.11.2 Debate Related to The Connections Between Temperament And ADHD**

The other discussions centre on the links between ADHD and temperament. According to Woods & Ploof (1997) (as cited in Shorena, 2006), the stimulation provided by the child's environment - represented by parents, teachers, and significant others - as well as the cultural

context in which the child is born - can be seen as interacting with the child's fundamental (innate) temperament to cause the development of the ADHD symptomatology. The way that different people react to conditioning varies. Simply put, individuals have varying abilities to internalise psychological pain and emotional pleasure from the moment they are born. When measuring the population's capacity, one would notice a normal distribution curve, with the majority of individuals having an average capacity and a small percentage falling on the extremes with either excess or deficit capacity (Woods & Ploof, 1997, as cited in Shorena, 2006).

An extreme example of a naturally occurring temperament spectrum is ADHD. Training children with ADHD can be challenging due to the minimal impact of rewards and punishments on their behaviour. Therefore, to increase the activity of the reward and punishment systems in their brains, ADHD children need a lot of monitoring and discipline from others (instant reinforcement, repetition, and consistency) (Woods & Ploof, 1997, as cited in Shorena, 2006). According to Keirsey (2002), a child's temperament may occasionally be misunderstood and contribute to a mistaken diagnosis of ADHD, while the child's temperament is the real issue and calls for a psychosocial approach.

Temperament is a topic with a long history. The diagnosis of children with ADHD, many of whom are concrete in perception and impulsive in action, is quite like Aristotle's Hedonics type (Keirsey, 2002). Therefore, if there is nothing in the task that appeals to their disposition, they will not be able to maintain their attention to schoolwork. Children with this temperament are more likely to disobey the teacher's instructions or forget their homework. This lack of interest barely qualifies as a neurological impairment. The issue is a conflict between two temperamental types: those who value opportunities for fun and those who value deadlines for completing tasks (Keirsey, 2002)

### **2.11.3 Controversies Around the Term ADHD**

The other point of contention is the term "attention deficit." Medical professionals attempt to increase children's attention with stimulant medicines because they believe that they do not "have" enough attention to succeed in school (Keirsey, 2002). However, attention is a type of awareness, according to psychologists and other behaviour scientists, making it a speculative mental event that is challenging to see. When children are not actively working on their homework, it is, therefore, impossible to discern what they are focusing on (Keirsey, 2002). To boost their interest in school activities, they require various forms of psychosocial assistance rather than physical intervention. Of course, "the symptoms" of attention deficit, such as not

paying attention to homework, disobeying orders from teachers, etc., do not cause the deficit (Keirse, 2002).

#### **2.11.4 Gap in Literature**

Understanding the nature of ADHD and its implications can highlight the importance of providing support to students with ADHD in special needs classrooms. ADHD's impact on student performance in the classroom and development poses a significant challenge for both teachers and students. (American Psychiatric Association (2013), as cited in Lolk, 2013).

Research studies have primarily focused on addressing ADHD support measures for teachers in primary schools (Lynch & Quinn, 2016). There is limited research on teacher support methods for students with ADHD in special needs schools. This study aimed to address this gap by exploring the different support strategies that teachers in special needs schools can utilise to assist and facilitate students with ADHD. This study could potentially lead to future recommendations for support strategies for children with ADHD in special schools.

#### **2.12 Conclusion**

This chapter investigated a significant span of literature on teacher support techniques as well as ADHD. The studies showed teachers are less learned about various support techniques to be utilised in special schools for students with ADHD. They also discovered a wealth of information in literature as most of the published works focus on support strategies for teachers in mainstream schools, with less emphasis on support techniques in Special schools. The following chapter presents a theoretical framework that supports this review.

## CHAPTER 3: THEORETICAL FRAMEWORK

### 3.1 Introduction

The literature on support methods for teachers in special needs schools was covered in the previous chapter. It also included information on teacher support techniques and ADHD, including its causes, symptoms, development, and difficulties in the classroom. The theoretical foundation for this investigation is presented and discussed in this chapter.

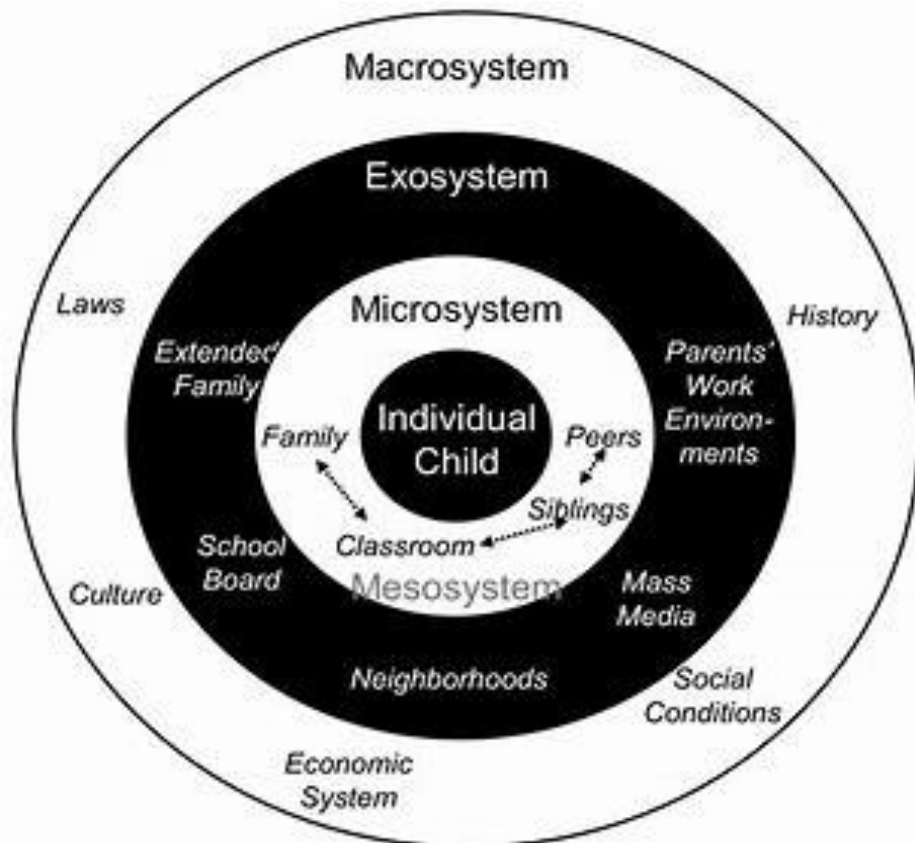
The Bioecological model, also known as Urie Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1977), outlines the lifelong ongoing adjustments that people make in response to the changing settings they face. Through his work, Bronfenbrenner aimed to broaden the narrow focus of the developmental study that psychologists carried out in the 1970s. According to Bronfenbrenner's theory, developmental stages that take place in the setting of intricately interwoven systems have an impact on the quality and context of people's lives. He also pointed out that people's habitats and ecological realities have an impact on how they develop, including how they behave.

Bronfenbrenner discovered that the best outcomes in development depend on having happy, healthy, and safe social situations. He believed that systems like family, school, and job directly affect people while policies, resources, and other people's expectations have an indirect effect. He pioneered the notion that individuals can influence their circumstances and that dynamic environments have a significant impact on how people develop (Bronfenbrenner, 1977). the activities they engage in, such as social contacts, physical activity, and maintenance. Personal qualities like intelligence, temperament, physical appearance, and chores can have an impact on the environment and its effects (Bronfenbrenner & Morris, 2007).

Furthermore, Urie Bronfenbrenner's Ecological Systems Theory is extensively documented and deepens our comprehension of child development. It could be beneficial to expand teachers' support strategies for helping an ADHD child in a special needs classroom. For this reason, the research utilised this ancient yet significant theory as the basis for the study. Moreover, this theory offered teachers a new perspective on the importance of child development and the reasons behind the necessity to assist students with special needs in typical classroom environments.

### 3.2 Urie Bronfenbrenner's Ecological Systems Theory

Figure 3.1 illustrates the Ecological System Theory. According to Bronfenbrenner (1995, p. 650), developing individuals go through "processes of progressively more complex reciprocal interactions" with other active, evolving "biopsychological" individuals as well as with objects and symbols in their environment. The relationship between these developmental stages and a child in a special needs school was subsequently thoroughly explained.



**Figure 3.1 Bronfenbrenner's ecological theory of development.**

Source: (Bronfenbrenner, 1977).

### 3.3 The Five Ecological Systems

#### 3.3.1 The Microsystem

The elements that directly affect a child in their immediate environment, such as parents, siblings, teachers, and schoolmates, are part of the microsystem, which is the first level of Bronfenbrenner's theory. Relationships in a microsystem are reciprocal, which means that while children can be impacted by others in their surroundings, they can also alter the attitudes and behaviours of others (Bronfenbrenner, 1977). The way a child treats those in their

microsystem can also be influenced by how they react to them. To encourage and support the child's growth, interactions within microsystems are frequently very intimate (Bronfenbrenner, 1977). It is believed that a child will thrive when they have a strong, nurturing bond with their parents.

In contrast, a child will suffer from having distant or uncaring parents (Bronfenbrenner, 1977). This study aims to investigate the assistance provided to students with ADHD from their families, communities, places of worship, and teachers at school. The main focus was on the assumptions and concepts related to how individuals are supported and managed in their immediate environments.

### **3.3.2 The Mesosystem**

The interactions between the child's microsystems, such as those between parents and teachers or between classmates and siblings, are included in the mesosystem (Bronfenbrenner, 1977). According to Bronfenbrenner (1977), the mesosystem is where a person's particular microsystem interacts with one another and ceases to operate separately. For instance, in this study, if a parent of a child with ADHD in a special school has a positive relationship with the child's teacher, this interaction may have an impact on the child's development because the teacher will be supporting a child with ADHD and will be able to share support strategies with the parent to make learning easier for the child. A mesosystem is essentially a system of microsystems. According to the ecological systems theory, a child's development should be positively impacted if their parents and teachers get along and have a good relationship, as opposed to negatively impacted if they do not (Bronfenbrenner, 1977).

### **3.3.3 The exosystem**

The exosystem is a component of the ecological systems theory developed by Urie Bronfenbrenner in the 1970s. It incorporates other formal and informal social structures, which do not contain the child but indirectly influence them as they affect one of the microsystems (Bronfenbrenner, 1977). Examples of exosystems include the neighbourhood, parents' workplaces, parents' friends, and the mass media. These are environments in which the child is not involved and are external to their experience but affect them anyway. For this study, policies created by the Department of Education (DCAPS) in special schools are an example of ecosystems that have an impact on children with ADHD. These policies state that all students should be in the same class and follow the same curriculum, which is ineffective for children with ADHD. Instead, these students need to be taught a different curriculum by special teachers. The hiring process for teachers in special schools at the Department of Education is

flawed as many special school teachers do not possess a comprehensive understanding of ADHD and struggle to support students with ADHD in their classrooms effectively. This is because of the way that ADHD is covered in university curricula. Regulations created by the school's School Governing Board (SGB) do not adequately cater to the needs of a child with ADHD, as they are generalised for all students without considering individual requirements in a specialised school setting. These scenarios do not involve the child directly and are beyond their realm of experience, yet they still affect them.

### **3.3.4 The Macrosystem**

The macrosystem is a part of Bronfenbrenner's ecological systems theory that focuses on how cultural factors like socioeconomic status, wealth, poverty, and ethnicity influence a child's development. As a result, the culture in which people live may have an impact on their opinions and ways of seeing the world (Bronfenbrenner, 1977). The macrosystem is different from the preceding ecosystem in that it refers to the society and culture that the child is developing in rather than the individual settings of one developing youngster (Bronfenbrenner, 1977). For this study, social standing influences the effects of authority, with differences dependent on race and culture. Culture has a significant impact on a child's development. For instance, in certain cultures, there is a misconception that a child's ADHD is linked to having parents from different racial or ethnic backgrounds. This contributes to parental lack of knowledge, which hinders their capacity to engage with the school for improved child welfare.

### **3.3.5 The chronosystem**

The chronosystem is the last level of Bronfenbrenner's ecological systems theory. This system is made up of all environmental changes that take place throughout a lifetime and have an impact on development, such as significant life transitions and historical events (Bronfenbrenner, 1977). These might include transitions that are typical of life, like starting school, as well as non-typical ones, like parents divorcing or needing to move to a new home (Bronfenbrenner, 1995). For instance, in one study, having a knowledgeable and understanding teacher for a student with ADHD is very beneficial since the student knows they have a helpful teacher who understands the child and uses various teaching and supporting tactics. The child will become comfortable in and like that classroom. Once the school year ends, the child will need to transition to a different class, which can pose challenges for a child with ADHD and affect their growth.

### 3.4 Classroom Application

Early educational curriculums and practices have been connected to psychology and educational philosophy using the Ecological Systems philosophy. The philosophy is centred on the growing child, and everything that happens inside and between the five ecological systems is done to help the child with ADHD in the classroom (Bronfenbrenner, 1977):

- The theory states that to support the development of ecological systems in educational practice, parents and teachers should maintain open lines of communication and collaborate for the benefit of the child. With the instructor and a parent providing support in a positive relationship, assisting an ADHD student in the classroom will be easier for the teacher.
- Teachers should also be aware of the circumstances that students' families could be going through, including any social or economic aspects of the various systems. Learning is made simpler when a teacher can relate to a student's condition since they will be able to support the ADHD child in any circumstance.
- By the notion that a child's growth should be positively influenced by their parents' and teachers' favourable interactions.
- The child must also actively participate in their academic and social learning. To foster development, individuals need to collaborate with peers and engage in valuable educational activities (Evans, 2012).

The hypothesis suggests that one of the elements influencing school climate is a productive learning environment. Teachers play a vital role in fostering an effective and supportive learning environment through their dedication to providing different learning techniques, including scaffolding, cooperative work, group work, and connecting attitudes about their potential (Darling-Hammond, Flock, Cook-Harvey, Barron, & Osher, 2020).

Group projects and collaborative learning are crucial classroom learning strategies that teachers should consider. Students who enjoy collaborating with their peers and work cooperatively to accomplish a common objective have a higher sense of school belonging (Keyes, 2019). Cohen and Viola (2022) made it clear that group work is utilised to help students develop their social skills and satisfy their need to belong, as well as to support one another and create their sense of self (Booker, 2021). Students who participate in group projects also learn responsibility and teamwork abilities that they will need in the workplace in the future (Miller & Desberg, 2009).

Teachers should also think about implementing connective instruction. Connective instruction, according to Cooper (2014), is "a category of teaching practices in which teachers support students in creating personal connections to a class" (Cooper, 2014, p. 367). As a result, teachers encourage their learners to connect what they learn in the classroom to their attitudes, beliefs, and actions outside of it. "Connective instruction recognises and respects the unique identities of individuals, taking into account their interests, perspectives, personalities, and life experiences" (Cooper, 2014, p. 367). As a result, teachers must create a learning environment that can accommodate students of all abilities and interests as well as represent the variety of their lives and cultures (Hayes, O' Toole & Halpenny, 2022). This method will help connect students' lives with their education.

Teachers must employ a culturally responsive pedagogy (CRP) while working with students who come from various social, cultural, and learning backgrounds to effectively convey what an effective learning environment looks like (Hayes, O' Toole & Halpenny, 2022). Accordingly, for students to achieve academic success while maintaining their cultural and linguistic identities, teachers must establish links to their students' cultures, languages, and daily experiences (Aceves & Orosco, 2014). To develop engaging educational activities that consider the variety of learners in the class, teachers would need to be aware of the various cultures represented in their respective classrooms. To help their students develop their critical thinking abilities, teachers must promote the participation of all varied children in multicultural classrooms.

To give students a chance to compare, investigate, and get familiar with different beliefs, lifestyles, and cultural contexts, (Hayes, O'Toole & Halpenny (2022) advised developing a rich, diverse learning environment (Hayes, 2017, p. 104). Adolescent students can address these subjects with their peers in the classroom using activities that are connected to "social injustices," "stereotyping," and "implicit bias" so that they become aware of other students' actual experiences (Robinson, 2020). As a result, putting the CRP's tenets into practice can address the issues multicultural classrooms face (Berlian & Huda, 2022), foster a sense of community among diverse students (Robinson, 2020), aid students in understanding the subject matter better, and enhance their behavioural, emotional, and cognitive engagement (Harris, 2021).

Faour (2012) has stressed the significance of developing critical thinking, problem-solving abilities, and creativity as part of the teaching-learning process in addition to adapting lessons

to the needs and interests of the students. Encouragement of experimenting is another beneficial activity. The American Psychological Association (2002) emphasised the need to encourage students to experiment because doing so shows that they are confident and eager to learn new things. Students can establish their sense of identity in this way, among others.

In order to enhance students' learning experiences and promote higher levels of intrinsic motivation and self-esteem, it is crucial for teachers to acknowledge and respect students' need for autonomy (Booker, 2021) and give them the freedom to choose a task that is of value and interest to them (Wallace, 2012). Otherwise, pupils will not be inspired to engage in class activities and will not want to (Deci, 1980). The sense of belonging to their classroom can be diminished if they feel excluded (Goodenow, 1993).

### **3.5 The Bioecological Model**

It is vital to note that Bronfenbrenner (1994) later changed the name of his theory to the "Bioecological model" to reflect this revision. The permanent and persistent kinds of contact in the near environment were of more interest to Bronfenbrenner as he focused on the proximal development processes. His attention switched from environmental factors to the maturational processes people go through; development is a result of an active, developing biopsychological human organism's interactions with the people, things, and symbols in its immediate external environment, which become progressively more complicated reciprocal relationships (Bronfenbrenner,1995).

Moreover, Bronfenbrenner emphasised the significance of concentrating on the individual, the setting, and the developmental outcome to comprehend how proximal processes influence development over time, considering that these processes vary and impact individuals differently (Bronfenbrenner,1995).

### **3.6 Critical Evaluation**

The Bronfenbrenner model quickly gained recognition among psychologists, sociologists, and teachers studying child development as a valuable framework. According to Hayes (2017), the Ecological Systems Theory offers a comprehensive strategy that considers all the systems that children and their families are a part of and appropriately reflects the dynamic nature of genuine family connections. Paat (2013) examines the applicability of Bronfenbrenner's theory to the

growth of immigrant children. They contend that cultural variations are likely to influence how immigrant children experience various ecological systems. The delivery of social work services to these children can be strengthened by having a better understanding of their ecological context.

There is a lack of research on the connections between neighbourhoods and a child's family, which is a limitation of the Ecological Systems Theory (Leventhal & Brooks-Gunn, 2000). Therefore, it is uncertain to what extent these systems can influence a child's growth. One limitation of Bronfenbrenner's hypothesis is its inability to be empirically tested. While research on ecological systems may indicate an impact, it cannot definitively attribute the impacts to the systems themselves. Furthermore, this argument might imply that people without robust and advantageous ecological systems are less developed. This may be the case in some instances, but many people can nevertheless grow into complete persons even in the absence of beneficial influences from their ecological systems.

For instance, it is inaccurate to claim that every person brought up in underprivileged areas of the world will undergo adverse development. In this scenario, some children may not face any repercussions if their teachers and parents have a good relationship that does not affect them. Therefore, implementing this theory should not be utilised to make broad assumptions about individuals (Leventhal & Brooks-Gunn, 2000).

### **3.7 Bronfenbrenner's Theory in the 21st Century**

Ever since this hypothesis was initially suggested about technological advancements, the world has undergone a remarkable change. One may include influences from social media, video games, and other contemporary connections with the ecological system in the exosystem of a child. This would imply that ecological systems are still relevant but may evolve to incorporate fresh contemporary innovations. In their study, Kelly & Coughlan (2019) crafted a theoretical framework for youth mental health recovery through constructivist grounded theory analysis. They found that their updated theory had several links to Bronfenbrenner's ecological systems theory. Their theory, which is consistent with Bronfenbrenner's theory that the ecological systems of the young person, such as peers, family, and school, all aid in mental health development, suggested that the elements of mental health recovery are embedded in the "ecological context of influential relationships." (Kelly & Coughlan, 2019).

Ecological Systems theory was introduced as a theoretical concept by Bronfenbrenner over 30 years ago, though his research based on the theoretical underpinnings started several decades before the theory's inception (Bronfenbrenner, 1979). Bronfenbrenner wanted to develop a theory of human development that would consider the influences of all the systems that play a role in impacting the lived experiences of the individual, no matter how remote the influence is (Bronfenbrenner, 1994). Today, many of these concepts are commonplace in social work practice (micro-, meso-, and macro-systems, for instance); however, at the time of their development, they helped to alter the prism through which social scientists would come to examine human development.

### **3.8 Empirical Evidence**

Numerous research has investigated how children are affected by their school environment. Lippard, Paro, Rouse & Crosby (2017) conducted a study evaluating Bronfenbrenner's hypothesis. Through teacher reports and in-class observations, they investigated the interactions between teachers and students. They discovered that these connections had a substantial bearing on the children's academic performance and classroom behaviour, indicating that they are crucial for their growth and supporting the Ecological Systems Theory.

Wilson (2003) found that fostering a supportive learning environment through a school ethos that values diversity had a favourable impact on how well students get along with one another. This type of school culture has an impact on those who are a part of a child's developing ecological systems. Langford, Bonell, Jones, Pouliou, Murphy, Waters, Komro, Gibbs, Magnus, and Campbell (2014) discovered that whole-school approaches to the health curriculum can favourably increase academic achievement and student well-being; as a result, the microsystems have an impact on the development of the children.

### **3.9 Chapter conclusion**

Overall, fostering a positive and inclusive school culture can greatly impact students' academic achievements and overall well-being. By emphasising inclusivity and creating a nurturing educational atmosphere, schools can assist students in cultivating healthy connections with their classmates and instructors, which in turn promotes their holistic growth within their surrounding environments. According to a study by Langford et al. (2014), taking a comprehensive approach to health education can greatly improve academic achievement and

the well-being of students. This highlights the significance of considering all aspects of education. Ultimately, the manner in which schools mould their culture and values can greatly influence the growth and achievements of their students.

## **CHAPTER 4: RESEARCH METHODOLOGY**

### **4.1 Introduction**

The previous chapter provided a crucial theoretical foundation for this investigation. This chapter offers a comprehensive overview of the research methodology. This covers the research paradigm, research approach, sampling, research design, data creation, data analysis, validity, and dependability of the study, in addition to the researcher's ethical standards. The topics of non-maleficence, beneficence, and the study's limits will all be covered in this chapter.

Given that this research was exploratory, a qualitative methodology was used in the study. To comprehend and explain social events, qualitative research typically combines observations, questionnaires, and interviews (Myers, 1997). According to Myers (1997), qualitative research methods are created to help researchers comprehend people and the social and cultural environments in which they live. Rubi & Babbie (2010) stated that a qualitative approach is an inductive strategy that uncovers the underlying meaning of human experiences and offers a detailed account of the facts of the topic being studied.

### **4.2 Paradigm**

This study was underpinned by an interpretivist paradigm grounded in the world of lived experiences. According to Bertram & Christiansen (2014), this paradigm aims to comprehend the social world. They acknowledge various interpretations as equally valid. Results are generated, not found. In the same way, Cohen & Manion (1994, p.36) propose that interpretive research approaches have the intention of understanding "the world of human experience", suggesting that "reality is socially constructed" (Mertens, 2007, p.12). The interpretivist researcher tends to depend on the "participants' views of the situation being studied" and recognizes the impact on the research of their background and experiences (Creswell & Creswell 2017, p.8).

Constructivists do not generally begin with a theory (as with post-positivists). Rather, they "generate or inductively develop a theory or pattern of meanings" (Ollerenshaw & Creswell, 2002, p.9) throughout the research process (Creswell and Creswell, 2017, as cited in Alharahsheh & Pius, 2020). Beliefs of the interpretivist approach, Relativist ontology: Reality is perceived through intersubjectivity through thought of meanings as well as understandings of social and experiential aspects in the research (Saunders, 2012). Subjective epistemology,

this approach provides a clear link between the research and research subject as it assumes that humans cannot be divided from their knowledge (Saunders, 2012).

Alharahsheh & Pius (2020) pointed out the following qualities of the interpretivist paradigm. Initially, the research would prioritise the entire experience rather than focusing on specific parts of it. Furthermore, the development of research questions and problem identification would largely depend on the researcher's subjective factors, such as interest, participation, and commitment. Additionally, it would allow researchers to explore individual experiences more deeply through casual conversations and interviews. Further, delving into the depths of human experiences by utilising qualitative designs and methodologies. Furthermore, it would allow for leveraging experience as a crucial element and contribution to bolster scientific research.

In addition, it would enable researchers to delve deeper into individual experiences rather than relying on generalised measurements or expectations as outlined in the positivist paradigm. Experience is largely integrated within subjects and objects (Alharahsheh & Pius (2020)). This paradigm was chosen for this study as it can provide in-depth knowledge of certain backgrounds, such as cross-cultural studies, factors influencing certain growth through generation and interpretation of qualitative data leading to profound insight and conclusions that may differ from others (Saunders, 2012). Furthermore, adopting the interpretivist paradigm would generate high-level data validity as it is based on personal contributions with deliberations of different variables (Myers, 2008).

Given that this paradigm focuses on individuals' experiences, it allowed the researcher to provide teachers with an opportunity to share their expertise on ADHD and the various support strategies they offer to students in the classroom.

### **4.3 Research approach**

This was a qualitative study as it aimed to explore teacher support strategies for students with Attention Deficit Hyperactivity Disorder (ADHD) in a special needs school. According to Ahmad (2019), qualitative research is multimethod in focus, involving an explanatory, realistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, trying to make sense of or interpret phenomena in terms of the meanings people bring to them. Wilson, Mura, Sharif & Wijesinghe (2020) explained that qualitative research involves the studied use and collection of a variety of empirical materials – case studies, personal experiences, introspective, life story, interviews, observational, historical,

interactional, and visual texts that describe routine and problematic moments and meanings in individuals' lives. Hence qualitative approach was useful in this study as it aimed to discover teachers' knowledge on support strategies for students with Attention Deficit Hyperactivity Disorder (ADHD) in a special needs school.

#### **4.4 Sampling**

Purposive sampling was selected for this study, where six special needs teachers were selected as participants. According to Kalu (2019), purposive sampling involves the researcher selecting specific individuals, groups, or objects to be part of the sample. Focusing on a particular group, understanding that it may not be reflective of a larger population but rather unique in its own right. In a study by Chivanga & Monyai (2016), purposive sampling allows researchers to select individuals who are considered most capable of providing the necessary data to tackle the research problem. Choosing participants purposefully enables the researcher to exclude individuals who may not provide relevant information (Acharya & Prakash, 2013).

In this study, the use of six participants was very useful to the study as the researcher was able to work effectively with them to gain more knowledge from their experiences of supporting students with ADHD. This research consisted of two foundation phase teachers, two intermediate phase teachers, and two senior phase teachers in a special needs school, who shared information freely at a convenient time for all parties involved, which was after school hours.

#### **4.5 Inclusion and exclusion Criteria**

By thoughtfully choosing teacher participants who meet these criteria, the research study can ensure that the insights and perspectives gathered will be valuable and relevant to the specific challenges faced by students with ADHD in a special needs school setting.

##### **4.5.1 1.1.1 Inclusive criteria**

- a) Over 5 years of experience working with individuals who have ADHD in schools.
- b) Trained in a specialised program to provide support for individuals with unique learning requirements.
- c) An openness to working together with fellow professionals in the industry.

##### **4.5.2 1.1.2 Exclusive criteria**

- a) Having less than 5 years of experience working with students with ADHD.

- b) No willingness to participate in ongoing professional development related to ADHD.

#### **4.6 Research design**

A case study was used for this research. According to Thomas (2021), a case study involves a thorough examination of a specific case within its context. Similarly, Heale & Twycross (2018) described a case study as an empirical inquiry that delves deeply into a present event and situates it within its real context. The study will use an explanatory case study. An explanatory case study provides a comprehensive understanding of the underlying factors or reasons behind a particular phenomenon (Thomas, 2021). This design is frequently utilised when examining a real-life phenomenon or event. Once an individual comprehends the factors contributing to a phenomenon, they can then implement modifications to improve or remove the variables responsible for it. According to Yin (2009), the case could refer to an individual or a group of people. Case studies aim to provide a detailed account of specific situations and can generate hypotheses for validation. Case studies aim to capture the past lived experiences of participants (Singh, Atullahjan, Ndiaye, Das, Wise, Alter & Wise, 2021). As a result, this study used a case study to get in-depth knowledge of support strategies used by teachers in special needs schools; the researcher was able to ask teachers questions, and they answered based on their experiences of working with ADHD students in their classroom.

#### **4.7 Data generation**

##### **4.7.1 Interview**

Jones (2020) defined an interview as a conversation between a researcher and a respondent. For this study, unstructured interviews with open-ended questions were used to gain more insight into teachers' support strategies. Bihu & Ghafoor (2020) explained unstructured interviews; the researcher introduces the topic and lets the respondent answer in the way they like. During the first session, participants were invited to discuss their expertise in assisting students with ADHD. Each participant had thirty minutes to share their experiences. Through unstructured interviews, participants felt comfortable sharing the difficulties they faced when teaching students with ADHD, as well as what strategies were effective and ineffective for them. Questions such as "Why is it necessary to support ADHD students in class?" "What support strategies do they use?" and "What could be done better to assist students?" were asked. With these probing questions, the participants were able to share their experiences freely, leading to valuable insights and knowledge from seasoned teachers.

#### **4.7.2 Observation**

Qaddo (2019) described observation as the researcher visiting the study site, such as a school, classroom, or community meeting space, to observe the activities. Pacheco-Vega (2019) pointed out that unstructured observation is when the researcher writes about what they have observed. For this study, unstructured observation was utilised. A teacher's lesson was observed for thirty minutes to identify the support strategies used for learners with ADHD. After observing how they supported ADHD students, the researcher could freely write about the observations without following any checklist. Visits were conducted for these six teachers on various days. An investigation was conducted to determine whether all teachers utilised similar or different methods to support students and to evaluate the effectiveness of these methods.

#### **4.7.3 Questionnaires**

According to Bertram & Christiansen (2014), a questionnaire is a list of questions that the respondent answers. Semi-structured questionnaires were used for this study, as they asked more open-ended questions. The questionnaire contained the following questions: What do you know about support strategies for students with ADHD? Why do you feel the need to support ADHD students in your classroom? What techniques do you use in your class to support these students? After collecting the questionnaires, they were analysed to determine if they employed consistent methods to support students with ADHD in the classroom.

#### **4.8 Data analysis**

To analyse data for this study, the thematic analysis was employed. Braun and Clarke (2019) defined thematic analysis as a method for analysing qualitative data that requires searching across a data set to recognise, analyse, and report repetitive patterns. It is a method for the recitation of data, but it also involves interpretation in the procedures of selecting codes and creating themes. A unique feature of thematic analysis is its flexibility to be used in different theoretical frameworks and to be applied to a wide range of study questions, designs, and sample sizes (Finkelstein, Sharma & Furlonger, 2021). Parannagari & Chakrabarti (2020) defined thematic analysis as falling inside the realm of ethnography or as predominantly suited to phenomenology.

In a study, Braun & Clarke (2021) argue that thematic analysis is a robust analytic method that can serve as a cornerstone for various qualitative research approaches. It is clear that the principles of thematic analysis, including coding data, identifying themes, and presenting

findings, can be applied to various qualitative research approaches like grounded theory (Cristancho, Watling & Lingard 2021). Therefore, after meeting with the participants and generating data through interviews, questionnaires, and observation, the data was then categorised into themes.

#### **4.9 Validity and trustworthiness of the study**

According to Rose & Johnson (2020), trustworthiness in qualitative research indicates the systematic rigour of the research design, the reliability of the researcher, the authenticity of the results, and the applicability of the research techniques. It is the overall impression of quality linked with a research attempt. Harrison, MacGibbon, & Morton (2001) (as cited in Park, Choi, Choi, & Kim, 2019) recommended that trustworthiness is the key constituent to sustaining the place of qualitative research in the educational world. To ensure the trustworthiness of this study, techniques that will inaugurate credibility, which involved long arrangements with participants and insistent observation, were used. An audio recorder was used and the data was transcribed to ensure the trustworthiness of the data.

Creswell (2017) (as cited in Motulsky, 2021) explained that qualitative validity means that the researcher looks for the precision of the findings by employing certain measures, while qualitative reliability indicates that the researcher's approach is constant across different researchers and different projects (p. 201). Employing the strategy of triangulation was crucial to validate this study, as it involved conducting research from various perspectives. Huberman and Miles (1994) (as cited in Prince & Smith, 2021) refer to reliability as the accuracy of the research, particularly regarding the appropriate techniques chosen and how those methods were functional and employed in a qualitative research study.

Reliability refers to the consistency and stability of the methodological process, ensuring that it remains relatively steady throughout time and across different researchers and methodologies (Skrzynski & Creswell, 2020). In order to establish the study's reliability, the researcher ensured that the procedures employed (such as interviews, observations, and questionnaires) would yield consistent results if another researcher were to replicate the study.

## **4.10 Ethical Considerations:**

### **4.10.1 Autonomy**

According to Carvalho, Suzano, Anastassiou, Santoro, Oliveira & Goncalves (2021), ethics are norms for conduct that distinguish between acceptable and unacceptable behaviour. Ethics are important in research because they promote the aims of research, such as knowledge of truth and avoidance of error; for example, prohibitions against fabricating, falsifying, or misinterpreting research data promote truth and avoid error (Carvalho et al., 2021). This study received ethical approval at the KwaZulu-Natal University's higher degrees department (see Appendix C). Additionally, the researcher was given approval by the head of the school and the KwaZulu-Natal Department of Education to use teachers as participants (see Appendix A and D).

Moreover, participants were given prior information about the study's details, intent, and goals (see Appendix B). A written consent form was given to each participant, and they were required to sign it to confirm their agreement to participate in the study. Protecting the participants' identities is also essential. As a result, in this study, participants, the school, the neighbourhood where the school is located, and any organisations mentioned were all given pseudonyms.

### **4.10.2 Non-maleficence**

Bertram and Christiansen said, "Non-maleficence means do not harm" (2014, p. 66). The confidentiality of the information that participants in this research project provided was ensured and participants' names were also secured. The participants were also informed of the public disclosure plans for the data they gave. Participants also had the choice to leave the research project at any time.

### **4.10.3 Beneficence**

According to Bertram and Christiansen, "beneficence means should "be of benefit" to the research participants or other researchers" (2014, p. 67). This study aims to benefit both the participants and other educational psychology researchers. Participants had added to the body of knowledge regarding the various strategies teachers might employ to manage ADHD in special needs classes.

## **4.11 Chapter Summary**

The chapter focused on the methodology employed in the research. A qualitative approach was taken as the researcher wanted to explore in detail "Teacher Support for Students with Attention Deficit Hyperactivity Disorder in a Special Needs School". The research used a case

study research design and sampling was done through the purposive technique. Data collection tools for the study were interviews, questionnaires and observation. To analyse data for this study, thematic analysis was employed. Ethical considerations were taken into thought and action.

## **CHAPTER 5: DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS**

### **5.1 Introduction**

The previous chapter presented the research methodology, including the research questions and design. This chapter presents data generated from semi-structured interviews, structured observation, and unstructured questionnaires (as per the methods chosen). The recordings of the interviews were transcribed and analysed to develop themes. A discussion of the findings will be provided in this chapter.

### **5.2 Pseudonyms**

To respect participants' confidentiality and protect their identity, each participant was allocated a pseudonym. According to Lahman, Rodriguez, Moses, Griffin, Mendoza & Yacoub (2015), a pseudonym is a fictional name assigned to give anonymity to a person, group, or place.

### **5.3 Presentation**

The three main themes that emerged from this study were as follows:

Theme one: Teacher knowledge of support techniques for ADHD in a special needs school

Theme two: Support strategies implemented by teachers.

Theme three: The role of support for students with ADHD

Table 5.1 shows the pseudonyms of participants and their respective qualifications.

**Table 5.1 Participants and pseudonyms**

Participant	Pseudonyms	Qualification	Age
Participant 1	Amahle	B.Ed. Foundation Phase, B. Ed Honours in psycho-educational support	43

Participant	Pseudonyms	Qualification	Age
Participant 2	Zinhle	B.Ed. Foundation Phase, Post Graduate diploma in inclusive education	29
Participant 3	Sihle	B.Ed. Intermediate Phase	24
Participant 4	Thabo	B.Ed. Intermediate Phase, B.Ed. honours in Educational psychology	28
Participant 5	Samke	B.Ed. Intermediate and senior phase	27
Participant 6	Ayanda	B.Ed. Intermediate and senior phase	34

#### 5.4 Data analysis: themes

Table 5.2 below illustrates the themes and sub-themes emanating from this study.

**Table 5.2 Themes and the sub-themes emerging from the research**

Main –Theme	Sub-Theme
Teacher knowledge of support techniques for ADHD in a special needs school	<ul style="list-style-type: none"> <li>▪ Acquiring knowledge of support techniques</li> <li>▪ Difference between support techniques applied in mainstream and special needs classrooms</li> </ul>
Support strategies	<ul style="list-style-type: none"> <li>▪ Strategies they use</li> <li>▪ Effectiveness</li> </ul>
Do students with ADHD in a special needs school need support?	<ul style="list-style-type: none"> <li>▪ Do students in special needs schools with ADHD need support?</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Suggest ways you can provide additional support to these students</li> <li>▪ Doing things differently to support students with ADHD in your classroom.</li> </ul>
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## 5.5 Data analysis: themes

### 5.5.1 Interviews-Theme 1: Teacher knowledge of support techniques for students with attention deficit hyperactivity disorder (ADHD) in a special needs school

When asked about their knowledge of support techniques for children with ADHD in special needs, teachers came up with diverse methods which they learnt mostly when the need arose to implement those strategies in the classroom. Participants gained knowledge about ADHD support techniques through various avenues, including practical teaching experience, workshops, mentorship, consulting with school therapists, personal experiences with family members, and formal education.

*Amahle said: To be quite honest, I learned about ADHD and variety when I started working in a special school; I started to attend workshops. That is where I learned that as teachers we have different learners who require different supports.*

The neurodevelopmental disorder called ADHD is characterised by reduced levels of hyperactivity, impulsivity, and inattention (Schatzberg & Nemeroff, 2017). A wide range of children are impacted by ADHD, with official diagnoses occurring in early infancy in around 4% to 7% of cases (Cooper, 2001). It is quite common for a general education teacher to have a student in their class who has ADHD, considering how widespread the disorder is. Teachers in primary schools are often the first to notice behaviours that may be related to ADHD (Crispel & Kasperski, 2021). Another participant went on to say,

*Zinhle: During my first year of teaching practicals in a mainstream school, there was a learner in my class who always misbehaved. I thought he was doing it on purpose because he loved disrupting the whole class; I used to get angry. Until my mentor teacher sat down with me and told me the child had ADHD. She explained that since the child has ADHD, there are different techniques I can apply during the lesson to assist the child with ADHD and how much support is important to these kinds of learners. That is when I learned about support strategies.*

According to research, teachers' behaviours and students' academic and behavioural outcomes might affect children with ADHD (Baumgaertel, Wolraich & Dietrich, 1995, as cited in Kazda, Bell, Thomas, McGeechan, Sims & Barratt, 2021). One of these teacher factors is their familiarity with ADHD, the teacher's awareness of a student's issue, their familiarity with the intervention, or the acceptability of the remedy are all factors that could influence treatment efficacy (Vereb & DiPern, 2004 as cited in McIntyre, Baker & Overstreet, 2019).

Sihle's case highlighted the importance of working together with school therapists to improve teachers' understanding. The school therapist supported students with ADHD, focusing on the various challenges these learners may encounter in a special needs school. He said,

*“In my classroom, I have a learner called Thulani; he has disruptive behaviour, is very talkative, and cannot sit still even for a minute. During the lesson, you would ask questions, and he would blurt out wrong answers without even thinking; he likes running up and down during contact time. As I was worried about his behaviour in class, I consulted Ms Kedibone, a school therapist. She explained to me that Thulani was referred to this special school because of his disabilities, and ADHD is part of the reason he is in this school. She suggested new ways I could try to accommodate Thulani in my classroom; that is when I learned about ADHD support strategies. Thanks to the school therapist for opening my eyes.”*

Unfortunately, teachers frequently lack the expertise needed to design and implement successful classroom interventions (Barkley, DuPaul & McMurray, 1996, as cited in Leitner, 2014). This ignorance may have unfavourable effects. The ability to create and administer successful therapies for children with ADHD may be lacking in teachers (Geng, 2011). It is essential to make sure they understand how to engage and communicate effectively with children with ADHD to prevent any negative consequences. When working with children who have ADHD, it is important to incorporate appropriate gestures. Teachers' use of gestures can be affected by their patience, tolerance, and understanding of ADHD. Effective verbal communication by teachers is crucial for fostering a supportive classroom atmosphere. The choice of language plays a crucial role in the field of education and can greatly impact the outcome. Teachers need to understand how to effectively engage with students who have ADHD in a manner that is suitable and beneficial (Nijhuis et al., 2008). In relation to the participant's view above, Thabo's personal experience with a family member diagnosed with ADHD also influenced his understanding of support techniques. This personal connection

emphasises the multifaceted nature of teacher knowledge, including both formal education and personal experiences:

*“My brother has always misbehaved at home and school; as a family, we always thought he did this on purpose. Until my parents took him to a psychologist. That is when he was diagnosed with ADHD, and I started to read and learn more about support techniques for ADHD. That was very helpful because it also assisted me in teaching and supporting students with ADHD in my classroom.”*

Equipping teachers with the necessary resources to support individuals with ADHD has the potential to enhance their self-confidence and overall welfare (Nijhuis et al., 2008). Acquiring additional knowledge can also empower teachers and motivate them to support students who show signs of ADHD. This can lead to adjustments in their classroom management strategies (Csíkos & Sztányi, 2020). Research suggests that the qualities of teachers can have an impact on the behavioural and academic progress of children with ADHD (Booker, 2023). One factor that teachers need to consider is their level of understanding when it comes to ADHD. The effectiveness of a treatment plan can be influenced by various factors, such as the teacher's understanding of the student's condition and the acceptability of the intervention (Cortese et al., 2020). However, as noted by Cairncross and Miller (2020), teachers often lack the necessary knowledge and skills to implement classroom interventions effectively. This lack of understanding can have negative consequences. There may be a lack of expertise among teachers when it comes to developing and implementing effective therapies for children with ADHD (Young et al., 2020). To prevent any negative outcomes, it is essential to ensure that individuals are well-informed about how to interact and communicate with children who have ADHD effectively.

Moreover, Samke's specific circumstance of not receiving ADHD support strategies during university training points out a potential deficiency in pre-service teacher education. Samke faced a significant challenge when shifting from mainstream to special needs education, highlighting the necessity for more thorough training programmes:

*“I was never introduced to ADHD support strategies in a special needs school. When I was doing my university teaching training, since I got employed at this special school, that is where I learned about a variety of support techniques that a teacher can implement to support students in a special needs school, which has been a challenge on its own as I have never been exposed to learners with ADHD before.”*

Ayanda also has a similar situation.

*“... After I completed my degree, I got hired at a special school. I really do not know the difference between mainstream and special school support techniques; even in my classroom, I implement the support strategies I learned about.”*

Gaining a comprehensive understanding of ADHD is essential for recognising and identifying these symptoms. Teachers' behaviours and opinions of ADHD may also be shaped by information about the condition.

Despite the importance of teachers knowing ADHD, there has been limited research on the topic, and reports on teachers' understanding of the disorder have been inconsistent. A student's daily routine revolves around school, where they can engage with their teachers. Teachers play a crucial role in shaping a child's education. It is the responsibility of the teacher to intervene in the classroom when a child has been diagnosed with ADHD, and a treatment plan has been established. Therefore, teachers can develop effective behaviour management tactics and teaching strategies by being aware of their own needs (Ross-Hill, 2009). Children with ADHD frequently struggle in their academic endeavours. However, with the support and understanding of their teachers, they can receive the necessary assistance to thrive. Teachers must be aware of their unique needs and tailor lesson plans accordingly (Ross-Hill, 2009). For individuals with ADHD, there are specific interventions that can be particularly helpful, especially for those who have difficulties with communication, both verbally and nonverbally, to help them succeed.

The individuals who have a direct impact on a child's immediate surroundings, including parents, siblings, teachers, and schoolmates, are classified as part of the microsystem, which is the initial level of Bronfenbrenner's theory. Interactions within a microsystem are interconnected, indicating that individuals in their immediate environment can influence one another's thoughts and actions (Bronfenbrenner, 1977). Their reactions to them can also influence the way an individual interacts with others in their immediate environment. To foster and nurture a child's development, connections within microsystems often involve close and personal interactions (Bronfenbrenner, 1977). It is widely believed that a child's development can be positively influenced by having a strong, loving bond with their parents.

On the other hand, a child may experience negative effects when their parents are distant or uncaring (Bronfenbrenner, 1977). The focus of this study was to investigate the level of support provided to individuals with ADHD by their families, communities, places of worship, and

teachers at school. The emphasis was on the assumptions and concepts related to how individuals are supported and managed in their immediate environments.

### **5.5.2 Theme 2: Support Strategies Implemented**

The research question that led to the development of this theme was: How do support strategies for students in a special needs school differ from the ones used at mainstream schools? How do you support students with ADHD in your classroom? Respectively.

Participants showed different levels of understanding when it came to the distinctions between support strategies in special needs schools and mainstream schools. Some participants noted similarities in the strategies used, while others recognised their limited exposure to mainstream school practices. One of the frequently cited support strategies involves dividing tasks into smaller parts, utilising technology, offering additional assistance with organisation, customising instructions and assignments to meet individual needs, monitoring and interacting with students, and introducing incentives for positive behaviour and effort. Some teachers mentioned the importance of creating an organised classroom environment to minimise distractions, limiting directions, using different tools, and having flexible rules. According to *Amahle*,

*“I have only taught in a special needs school, and the support techniques I apply in my class are the ones I have learned about in workshops I have been attending; I really do not know the difference between the two. In my classroom, I have a student called Thando; during the lesson, he would look outside the window and lose concentration and listen when I was teaching or asking questions during the lesson. To improve his concentration span, I make sure I sit him in front of the chalkboard to make sure he does not look outside the window. Since he quickly loses focus, I make sure I cut his work into smaller pieces in order for him not to lose concentration. Even though sometimes it is difficult, I always try my best to support him.”*

Certain school-based management strategies have proven to be effective for students with ADHD: behavioural classroom management and organisational training. The behavioural classroom management approach promotes the cultivation of positive behaviours in the classroom, utilising reward systems or daily report cards to incentivise students while also discouraging negative behaviours (Tohara, 2021). This approach, led by the teacher, has been proven to have a positive impact on behaviour and academic engagement (Nijhuis et al., 2008). Although tested mostly in elementary schools, behavioural classroom management has been

shown to be effective for students of all ages. Organisational training is designed to equip individuals with essential skills for effective time management, planning, and maintaining an organised learning environment. These strategies are aimed at enhancing learning outcomes and minimising potential distractions. This management strategy has been tested with young individuals. These two management strategies require well-trained staff, such as teachers, counsellors, or school psychologists, to adhere to a specific plan in order to effectively teach and support positive behaviour (Csíkós & Sztányi, 2020). Effective collaboration among the school, parents, and healthcare providers is crucial to ensure the child receives the necessary support.

Zinhle demonstrated a comprehensive strategy by integrating technology, receiving support from the organisation, and providing personalised instruction to cater to the varied requirements of students with ADHD. With a focus on reducing distractions and closely monitoring students to pinpoint successful techniques, her approach is in line with evidence-based practices:

*“They do not differ that much because the support strategies I use in a special needs school are the same techniques I implemented when I was doing my teaching practicals in a mainstream school. I use technology to assist with tasks, Extra help with staying organised, instruction and assignments tailored to the child, Observe, and talk with a student about what helps them, and minimise distraction.”*

Understanding how to provide effective support for children with special educational needs in the classroom is a crucial aspect of a teacher’s role. Recent studies indicate that in a typical classroom, there are typically four children who require additional support for their educational needs (Warnes et al., 2022). Studies indicate that the conduct and methods of the classroom instructor have the most significant influence on the academic and social achievements of students with special educational needs (Csíkós & Sztányi, 2020). However, some mainstream teachers express concerns about effectively supporting students with special educational needs in the classroom (Warnes et al., 2022). Sihle illustrated that,

*“When I was teaching in a mainstream school, I was there on a one-month contract. I was never exposed to ADHD support strategies; I never got a chance to see and implement different support strategies to see if they are the same as the ones implemented in a special needs school. Supporting ADHD students in my classroom has always been a challenge because you can try multiple strategies, and they will not*

*be successful because the student does not have only one disability but two or three since they are in a special needs school. To make learning easy for Thulani in my classroom, I use the following strategies.*

- ❖ *Break projects into smaller pieces*
- ❖ *Reward good behaviour and good work.*
- ❖ *Limiting directions, making sure he sits away from disruptions such as doors, windows, and pencil sharpeners to limit distractions.*
- ❖ *Using different tools and flexible rules in the classroom.”*

The classroom environment plays a crucial role in determining whether students will thrive or face obstacles in their academic journey (Gonzales, 2020). Creating an environment that promotes attention, positive behaviour, and overall success in academics and social interactions involves building strong connections with students, implementing effective classroom management strategies, and arranging the physical space in a way that enhances learning. Having a strong connection with a teacher can greatly contribute to academic achievement for individuals with ADHD (De Villiers, 2022). Sihle's experience with Thulani illustrated the complexities of supporting students with multiple disabilities, including ADHD. His use of behavioural strategies, such as rewards for good behaviour and limiting distractions, demonstrated an awareness of the importance of individualised approaches in special needs settings (Kern et al., 2002).

Thabo and Ayanda mention some techniques that they have developed in their classroom that work for the best interest of the teacher and that of the student. Thabo's emphasis on task differentiation according to learners' abilities and maintaining a positive and organised classroom environment highlighted effective instructional practices. Thabo's acknowledgement of the positive changes observed in students reflects the impact of tailored support strategies on student outcomes. Ayanda's emphasis on providing extra time, short tasks, environmental changes, and breaks aligned with a proactive and flexible approach to meet the unique needs of students with ADHD. Her acknowledgement of the positive impact of these strategies on students' focus reinforces the significance of individualised support. ***Thabo said,***

*“I taught in both mainstream and special schools, and the support techniques used by teachers are the same. Firstly, when I set tasks for every lesson, I make sure the tasks are according to the learners' abilities. Secondly, I guide them throughout the lesson*

*and make sure that when I reprimand them, I do it politely and always talk positively. Thirdly, I make sure the class is well organised to avoid them being disrupted.”*

Respectively, Ayanda mentions that:

*“I am not well knowledgeable about support techniques for ADHD; I only know a few. For example, in my classroom, I support ADHD students by giving them extra time on the task. Once they complete the task, I give positive feedback. During the lesson, I allow breaks in between and make sure I give them short tasks. I changed the environment from time to time. Since ADHD students cannot sit still, I make sure I take them outside for fresh air so that when they return to class, they will be refreshed and sit still.”*

When teachers establish a strong connection with their learners and genuinely value their talents and passions, it fosters a greater motivation for success and a favourable response to the structure and guidelines in the classroom. When implementing a proactive approach to classroom management, teachers strive to provide comprehensive support to all students and establish an environment that fosters optimal learning conditions (De Villiers, 2022). Implementing effective management techniques involves providing clear instructions, offering constructive feedback, and fostering opportunities for collaboration among peers.

Additionally, providing them with more frequent praise when they follow the rules can be beneficial (De Villiers, 2022). Another strategy often suggested for individuals with ADHD is to make adjustments to the length and content of assignments in order to lessen the demands placed on them (Ross-Hill, 2009). By adjusting the length of an assignment to align with the attention spans of individuals, it is possible to minimise instances of off-task and disruptive behaviour. This approach is commonly used alongside teacher recognition that is dependent on finishing the task. As students demonstrate their development through smaller tasks, the level of assignments can be increased gradually, guiding them to meet the standards of the classroom.

One teacher’s comprehensive approach included detailed lesson planning, varied teaching aids, strategic seating arrangements, and positive reinforcement through praise. Her recognition of the variability in the effectiveness of strategies emphasises the dynamic nature of supporting students with ADHD. According to *Samke*,

*“I do not know; I only started teaching in a special school; I have never taught in a mainstream school. To support students in my class, I prepare a short, detailed exercise. I use different teaching aids to make learning easy and fun. In my classroom, I make sure students with ADHD sit far from learners who are chaotic because they will disrupt them. To avoid unnecessary movement, I make sure they sit in front of the board so that during the Maths lesson they can go easily to the chalkboard to complete the sums. When they write a correct answer, I make sure I say, ‘Let us give her a round of applause’ since praises are important to learners with ADHD. I also make sure I check their workbooks. I allow peer group assistance. I allow learners to move around to avoid frustration and reduce anxiety. I do not discipline a child with anger.”*

The provision of care, empathy, affection, and trust is known as emotional support, a form of social support (Langford, Bowsher, Maloney & Lillis, 1997). Based on research conducted by Lynch & Cicchetti (1992), engaging in this practice can create a sense of belonging within a supportive community (Cobb, 1976). Emotional support is essential for enhancing educational outcomes and protecting children's mental health and emotional well-being (Luthar, Cicchetti & Becker, 2000). According to Osterman (2002), establishing strong connections and a feeling of inclusion have been found to be connected to academic motivation, engagement, and performance. For individuals who face challenges in their personal and academic lives, having the support and care of a trusted adult in the classroom is essential for fostering a positive learning environment (Protheroe, 2007). For individuals in the academic community to enhance their abilities, it is crucial to provide them with emotional support. This can be achieved through counselling, engaging in activities that promote self-esteem, and demonstrating genuine care and attention (Kos, 2004).

The connections between the child's microsystems, like the ones between parents and teachers or between classmates and siblings, are part of the mesosystem (Bronfenbrenner, 1977). The mesosystem is the space where different components of a person's microsystem come together and no longer function independently (Evans, 2020). For instance, in this research, if a parent of a child with ADHD in a special needs school establishes a strong connection with the child's teacher, this dynamic could impact the child's growth. The teacher will offer assistance to the child with ADHD and provide strategies to the parent to improve the child's learning journey. A mesosystem can be seen as a network of interconnected microsystems. Based on the ecological systems theory, the development of a child can be influenced in a positive way when their parents and teachers have a harmonious and strong relationship.

Conversely, if their relationship is strained, it can have a negative impact on the child's development (Hayes et al., 2022). The hypothesis proposes that a key factor in shaping the atmosphere of a school is the presence of a conducive learning environment. Teachers are essential in creating a productive and encouraging learning atmosphere by utilising various teaching methods such as scaffolding, cooperative work, group work, and promoting positive attitudes towards students' abilities (Panopoulos & Drossinou-Korea, 2020).

Group projects and collaborative learning are essential classroom learning strategies that teachers should consider. Individuals who appreciate working together with their classmates and strive towards a shared goal tend to experience a greater sense of belonging within the school community (Evans, 2020). In their study, Cohen and Viola (2022) emphasised the importance of group work in fostering students' social skills, sense of belonging, and self-development (Booker, 2023). Individuals who engage in collaborative assignments also develop a sense of accountability and acquire valuable skills in collaboration that will prove essential in their professional endeavours (Gonzales, 2020). It would be beneficial for teachers to consider incorporating connective instruction into their teaching methods. Cooper (2001) defines connective instruction as a type of teaching method where teachers assist students in establishing personal connections to the subject matter. As a result, teachers emphasise the importance of students making connections between what they learn in the classroom and their attitudes, beliefs, and actions outside of it. "Connective instruction recognises the unique identities of students, acknowledging their interests, perspectives, personalities, and life experiences" (Cooper et al., 2014, p. 367). In order to meet the needs of all learners and foster inclusivity, teachers must establish a learning environment that embraces diverse abilities, interests, and backgrounds (Hayes et al., 2022). This method will bridge the gap between the lives of the students and their education.

### **5.5.3 Theme 3: Effectiveness of support strategies used for students with ADHD**

When asked the question: Are the support strategies that you implement in your special needs classroom effective for the students? Overall, participants noted positive changes and effectiveness in implementing support strategies for students with ADHD. Improved concentration reduced disruptive behaviour, and positive changes in student behaviour were reported as outcomes of applying these strategies. However, a few participants acknowledged that the effectiveness of strategies could vary, especially when dealing with students who have multiple disabilities. Amahle illustrated that:

*“Ever since I started to implement these strategies, I have seen much change, especially in Thando; he is now able to sit without being disturbed and starts to do his work and complete it because it has now been organised to suit his learning needs. Moreover, yes, they are effective because I see a change in my classroom after implementing these strategies.”*

Implementing school-based interventions is crucial for providing a comprehensive treatment plan for individuals with ADHD. These strategies can be helpful additions to psychotropic medication and home-based behavioural interventions, especially when it comes to improving academic and behavioural performance in classroom settings. Indeed, a comprehensive treatment plan will incorporate a blend of behavioural strategies implemented at home and school, potentially alongside the use of psychotropic medication (Crawford et al., 2020). When it comes to designing and implementing school-based interventions for this population, there are three important principles to consider (Byrd & Alexander, 2020).

Suggestions for additional support varied among participants, reflecting the individualised nature of students' needs. Strategies such as rewards for good behaviour, limiting distractions, adapting tasks, and providing positive reinforcement emerged as common recommendations.

***Sihle said:***

*“As I have stated, students in special needs schools differ; these support strategies, on one day they work on another day, will not work. This is due to a child being faced with multiple disabilities. I can say I do see some changes in Thulani after I have applied these strategies. I also see a change in his behaviour”.*

Addressing the behavioural difficulties exhibited by individuals with this disorder requires more than just focusing on antecedent or consequent events. In addition, several strategies that focus on previous experiences have the added benefit of directly improving academic performance.

Additionally, it is important to utilise assessment data in order to effectively develop, assess, and adjust interventions throughout the academic year (Lutz-Fritz & Hast, 2023). Using assessment-based interventions is likely to yield better results and save time compared to relying on trial-and-error strategies. The key to achieving academic and behavioural success lies in implementing a combination of classroom supports and strategies that are directly taught to students. Supporting students with attention deficit hyperactivity disorder (ADHD) in the classroom demands a creative, adaptable approach and a sincere dedication to their

achievements (Tohara, 2021). The participants' reflections on the effectiveness of support strategies underscored the variability in student responses.

Factors such as the presence of comorbid disabilities, individual differences, and the need for ongoing adjustments were highlighted. According to *Thabo*,

*“Yes, they are very effective; ever since I started implementing them, I have started seeing change in my students.”*

It is important to utilise various mediators, such as peers, computer technology, and students with ADHD, in order to distribute the responsibility of intervention and not overwhelm classroom teachers (Osher et al., 2020). Utilising collaborative consultation in the selection and creation of classroom interventions can greatly enhance the effectiveness of implementing interventions through various channels. Ayanda also agrees with what other teachers said:

*“Yes, using this technique has made life easy; now, students with ADHD sit still and focus during the lesson.”*

Comprehending and addressing the needs of individuals with ADHD can pose a challenge for teachers. Assessing the individual needs of each student while considering the obstacles presented by the learning setting is crucial. When creating interventions for individuals with ADHD, it is essential to prioritise prevention strategies that target environmental factors (Slobodin, 2023). By implementing these effective teaching strategies, a supportive and inclusive learning environment can be created where every child, including those with ADHD, can excel and flourish. Keep in mind that every person has unique qualities, and it might require some time to find the most suitable approach for everyone. Through offering guidance, empathy, and perseverance, we can inspire our children with ADHD to unlock their maximum capabilities and thrive academically and in all aspects of life.

The exosystem is a crucial part of the ecological systems theory formulated by Urie Bronfenbrenner. It involves various formal and informal social structures that have an indirect impact on children by affecting one of the microsystems (Bronfenbrenner, 1977). Some examples of exosystems are the neighbourhood, workplaces of parents, friends of parents, and the mass media (Tudge et al., 2022). These environments have a significant impact on the child, even though they are separate from their personal experiences. In this study, the policies implemented by the Department of Education (DCAPS) in special schools serve as examples of ecosystems that significantly influence children with ADHD. These policies suggest that

having all individuals in the same class and adhering to a uniform curriculum may not be the most effective approach for children with ADHD. Instead, these individuals require instruction from specialised teachers following a distinct curriculum. The hiring process for teachers in special schools at the Department of Education has some flaws. Many special needs schoolteachers do not have a thorough understanding of ADHD and find it challenging to offer proper support to students with ADHD in their classes. This is a result of how ADHD is approached in university curricula. The regulations created by the school's SGB may not fully consider the individual needs of children with ADHD in a special school setting, as they are primarily designed with all students in mind. These situations may be unfamiliar to the child, but they still influence them. Encourage regular collaboration between special needs schools and mainstream schools. Facilitate information exchange sessions, workshops, and joint training programs to promote the sharing of effective strategies and best practices. The establishment of platforms for teachers, therapists, and other professionals to collaborate on creating a holistic support system for students with ADHD will be of great importance.

## **5.6 Discussion**

While some participants indicated that support strategies were similar in special needs and mainstream schools, others admitted limited exposure to mainstream practices. This discrepancy highlights the importance of enhancing cross-disciplinary training and information exchange between special education and mainstream teachers. Exploring the strategies used in mainstream settings could provide insights for enhancing or adjusting practices in special needs schools (Ross-Hill, 2009). Participants highlighted the diverse needs of students with ADHD, emphasising that strategies might not work consistently due to the presence of multiple disabilities. This insight suggests a need for a more nuanced and personalised approach to support. Future research could focus on identifying specific strategies that are particularly effective for students with different combinations of disabilities, allowing for a more tailored and comprehensive support system (Nijhuis et al., 2008). Some participants mentioned using technology as a support tool.

Further exploration into the specific technologies employed and their impact on student engagement and learning outcomes could provide valuable insights. Understanding the role of technology in supporting students with ADHD could contribute to the development of innovative and effective teaching methods (Slobodin, 2023). The consistent mention of

positive reinforcement and praise as effective strategies indicates their crucial role in supporting students with ADHD. Exploring the psychological and behavioural impact of positive reinforcement in more depth could provide teachers with a better understanding of how to create a positive learning environment.

Additionally, investigating the long-term effects of such positive reinforcement on students' self-esteem and motivation could be beneficial (Gonzales, 2020). Participants highlighted the importance of collaboration with school therapists and professionals. Further exploration into the dynamics of these collaborative efforts, including communication strategies, information sharing, and joint decision-making, could offer insights into best practices for interdisciplinary collaboration in special education settings (De Villiers, 2022).

Participants shared diverse pathways through which they gained knowledge about ADHD and support techniques. Exploring the impact of different training methods and the effectiveness of ongoing professional development in enhancing teacher preparedness could inform education policies. Additionally, investigating the specific challenges teachers face when introduced to new support strategies could guide the development of targeted training programs (Ross-Hill, 2009). Exploring the role of parents in supporting students with ADHD, investigating how teachers collaborate with parents, sharing strategies, and receiving feedback and understanding the home-school partnership and its impact on students' overall development could provide insights into creating a more comprehensive support system (Tudge et al., 2022). Delving deeper into the strategies teachers use to create an ADHD-friendly classroom environment, exploring factors such as seating arrangements, sensory considerations, and visual aids and analysing how the physical and emotional classroom environment contributes to or hinders the effectiveness of support strategies are helpful (Panopoulos & Drossinou-Korea, 2020). Investigating the long-term academic and social outcomes for students with ADHD who have received specific support strategies and following up with these students over time to assess how early interventions in special needs schools may contribute to their overall success in education and life beyond the classroom (Evans, 2020). It is essential to evaluate teacher training programmes to ensure teachers are well-prepared to address ADHD in special needs settings and effectively integrate ADHD-specific strategies into the curriculum (Ross-Hill, 2009). Develop and implement robust teacher training programs that specifically focus on ADHD support strategies. Include practical, hands-on experiences, case studies, and workshops to expose teachers to a variety of effective techniques. Integrate ADHD-related

content into general teacher education curricula, ensuring that all teachers, regardless of their specialisation, are adequately equipped to support students with ADHD (Van Der Oord, 2020).

According to the Five Ecological Systems, a key factor in shaping the school climate is the presence of a conducive learning environment. Teachers are crucial in creating a productive and encouraging learning atmosphere by utilising various teaching methods such as scaffolding, cooperative work, and group work and fostering positive attitudes towards students' abilities (Darling-Hammond, Flock, Cook-Harvey, Barron & Osher, 2020). Group projects and collaborative learning are essential classroom learning strategies that educators should take into account. Individuals who derive satisfaction from working together with their classmates and strive towards a shared goal tend to experience a greater sense of belonging within the educational institution (Keyes, 2019). Cohen and Viola (2022) emphasised the importance of group work in fostering social skills, a sense of belonging, and self-development among individuals (Booker, 2021). Individuals who engage in collaborative assignments also develop a sense of accountability and acquire valuable skills in collaboration, which will prove essential in their future professional endeavours (Miller & Desberg, 2009). It would be beneficial for teachers to consider incorporating connective instruction into their teaching methods. Cooper (2014) defines connective instruction as a type of teaching method where teachers assist students in establishing personal connections to the subject matter (Cooper, 2014, p. 367). Teachers often motivate their students to make connections between what they learn in the classroom and how it relates to their attitudes, beliefs, and actions in their everyday lives. "Connective instruction acknowledges and values the distinct identities of individuals, considering their interests, perspectives, personalities, and life experiences" (Cooper, 2014, p. 367). Teachers must create a learning environment that can accommodate individuals with diverse abilities, interests, and backgrounds (Hayes, O' Toole & Halpenny, 2022). This approach will assist in bridging the gap between students' personal experiences and their academic pursuits.

The Bioecological Model emphasises the significance of long-lasting and consistent interactions within the immediate surroundings, which Bronfenbrenner found particularly important in understanding proximal development processes. His focus shifted from environmental factors to the maturational processes individuals experience. Development is influenced by the interactions between a developing human organism and the people, objects,

and symbols in its immediate external environment. These interactions gradually become more complex and reciprocal over time (Bronfenbrenner, 1995). In addition, Bronfenbrenner highlighted the importance of focussing on the individual, the environment, and the developmental outcome to understand how proximal processes affect development over time. It is crucial to recognise that these processes can vary and have different effects on individuals.

## **5.7 Chapter Summary**

This chapter presented the data analysis and discussion of findings based on semi-structured interviews with teachers in special needs schools. The themes identified - Teacher knowledge of support techniques for ADHD, Support strategies implemented by teachers, Experiences and perspectives of teachers working with students with ADHD. The discussion highlighted the diverse pathways through which teachers acquire knowledge, the variety of support strategies employed, and the multifaceted role of support in the educational experiences of students with ADHD. The implications for practice underscore the importance of ongoing professional development, individualised support, and collaborative efforts to create inclusive and supportive learning environments for students with ADHD in special needs schools. The following chapter presents a concluding discussion and implications for future research.

## **CHAPTER 6: CONCLUDING DISCUSSION AND IMPLICATIONS**

### **6.1 Introduction**

In the previous chapter, the researcher extensively analysed the data collected from semi-structured interviews, structured observation, and unstructured questionnaires. In this chapter, a thorough summary of the study's findings and discuss the potential implications for future research and educational policymakers will be presented.

### **6.2 Concluding Discussion on Findings**

This study focused on investigating teachers' understanding of support strategies for individuals with attention deficit hyperactivity disorder (ADHD) in specialised educational settings. The results revealed a complex situation where some teachers excelled at using support techniques while others struggled to help students with ADHD effectively. The differences among teachers reflect the results of McDougal, Tai, Stewart, Booth & Rhodes (2022), confirming varying levels of understanding about ADHD.

The variety of support strategies used by teachers was broad, including offering extra time, separating students, and reducing distractions in the environment. Interestingly, there was a significant difference between teachers in the intermediate and foundation phases, with the former showing a stronger preference for using support strategies. This difference suggests possible shortcomings in meeting the specific requirements of younger individuals with ADHD.

Repetition plays a crucial role in helping individuals with focus and attention challenges, as revealed by a significant finding. It was concerning to observe that only a small number of participants integrated this strategy into their teaching approaches, possibly neglecting a crucial factor for the academic achievement of students facing focus-related difficulties.

When dealing with impulsivity in ADHD, behavioural interventions such as in-class rewards were recognised. The strong connection between positive reinforcement and effective intervention strategies perfectly matches with well-known research results.

In addition, the research revealed a range of strategies used by teachers in South Africa, including extra classes, varying teaching styles, and peer assistance. The data highlighted the importance of teachers expanding their range of ADHD support strategies to provide a comprehensive approach that meets the varied needs of every individual.

## **6.3 Implications**

### **6.3.1 Learning Strategies**

The study's findings have implications that reach far beyond the classroom, highlighting the necessity for thorough training programmes to help teachers support students with ADHD. Teachers are advocating for longer professional development sessions that include a variety of learning materials, which is seen as a crucial suggestion for schools. With effective strategies and support in place, individuals with ADHD can excel in their academic pursuits and achieve their educational goals. Creating customised learning plans can be a valuable approach for assisting students with ADHD in an educational setting. The plans outline personalised accommodations and strategies tailored to meet the unique needs of each individual, fostering their academic success and development.

Furthermore, effective communication among teachers, parents, and any specialists involved in the individual's education is crucial for ensuring ongoing support and accommodations. Through collaboration, all individuals can remain updated on the progress and make necessary adjustments. It is crucial to acknowledge and celebrate achievements and advancements, regardless of size, to enhance their self-assurance and maintain their drive. By implementing effective strategies and providing necessary support, individuals with ADHD have the potential to succeed academically and reach their educational objectives. With proper assistance, individuals with ADHD can conquer obstacles and achieve their maximum capabilities. Encouraging transparent communication and teamwork among all individuals participating in the education process can help in delivering the required accommodations and modifications. Celebrating small victories along the way helps build confidence and keeps students motivated to continue working towards their academic goals. Having a strong support system enables individuals with ADHD to excel in their academics and achieve success in their educational pursuits.

Through exploring innovative approaches like personalised learning plans and behavioural interventions, the researcher aims to offer valuable insights on enhancing teacher support for this group. This study will not only add to the current literature on ADHD support but also provide useful suggestions for teachers aiming to enhance results for their pupils. This research aims to highlight the significance of teamwork among teachers, carers, and medical experts in establishing a nurturing setting for individuals with ADHD by identifying best practices and effective interventions, aiming to create a roadmap for teachers to follow to help individuals

succeed academically and socially. Ultimately, the aim is to equip teachers with the knowledge and resources necessary to create a positive influence on the lives of individuals with ADHD.

### **6.3.2 Collaboration**

Emphasising the importance of teachers working together with therapists and educational psychologists, collaboration emerged as a recurring theme. The results indicate the importance of promptly sharing information when individuals with ADHD are placed in certain classrooms, creating a more knowledgeable and encouraging educational setting. This collaboration can assist in guaranteeing that individuals with ADHD get the essential assistance both in the classroom and at home. Collaboration among teachers, parents, and healthcare professionals can lead to the creation of customised strategies and interventions to address the specific requirements of every individual. Open and regular communication among all parties is crucial for building a strong support system for the individual.

Furthermore, continuous professional development and training for teachers regarding ADHD awareness and management can improve their capacity to offer effective support. Through promoting teamwork and sharing knowledge, a welcoming and supportive learning atmosphere for individuals with ADHD can be established. By utilising a range of teaching techniques, instructors can guarantee that individuals with ADHD are equipped to thrive in the educational setting. One way to support individuals is by offering visual aids, breaking down tasks into smaller steps, and giving them the opportunity to take breaks as needed. In addition, establishing a welcoming and encouraging classroom atmosphere can boost students' confidence and enthusiasm for learning. Ultimately, by collaborating to tackle the specific obstacles encountered by individuals with ADHD, we can support them in achieving their maximum potential and excelling academically. Effective communication among teachers, parents, and other professionals engaged in the individual's education is crucial for offering continuous assistance. Through collaboration, everyone can be updated on the progress and make necessary adjustments. It is crucial to acknowledge and celebrate achievements and advancements, regardless of size, to enhance self-assurance and sustain motivation.

Collaboration among teachers, parents, and healthcare professionals is crucial in developing individualised plans for students with ADHD. The plan should outline strategies for symptom management, classroom accommodations, and frequent progress checks. Through regular review and adjustments to the plan, people can stay on track and progress towards their goals. Furthermore, offering continuous support and praise can assist individuals in remaining motivated and involved in their learning. With the appropriate support and resources,

individuals with ADHD can thrive academically and achieve their maximum capabilities. Collaboration between teachers and parents is crucial to creating a successful plan that caters to the individual needs of every student. This partnership can help identify any challenges or hurdles to success and address them promptly. Creating a nurturing and empathetic atmosphere can help individuals with ADHD feel motivated to conquer challenges and succeed in their studies. With dedication and perseverance, individuals can achieve great success and build a strong foundation for their future endeavours.

### **6.3.3 Necessity for training**

Programmes for preparing teachers were found to potentially lack modules focused on ADHD, indicating a gap that universities and colleges need to address. Suggestions involve providing thorough training on different learning disabilities to prepare future teachers better, improving their capacity to assist individuals with ADHD in special education environments. Improving teachers' understanding of ADHD can help them establish more inclusive and supportive learning environments for individuals with this condition. Moreover, integrating techniques for handling ADHD symptoms and behaviours into teacher training programmes can assist teachers in effectively assisting these individuals. By addressing this gap in education programmes, schools can better equip teachers to meet the different requirements of students with ADHD and other learning disabilities. This will ultimately result in enhanced academic performance and overall well-being for individuals with ADHD. With proper training and support, teachers can assist these individuals in excelling in the classroom and achieving their maximum capabilities. Emphasising the education and training of teachers in this field can help establish a more inclusive and fair learning atmosphere for all learners, irrespective of their unique requirements and obstacles.

Continuing education and specialised training are essential to help teachers remain current on the most recent research and effective strategies for assisting individuals with ADHD. By promoting a culture of ongoing learning and teamwork, educational institutions can establish a nurturing environment where teachers are encouraged to address the varied requirements of every student. In the end, supporting the education and training of teachers is a valuable investment in the achievement and welfare of every individual, fostering a more inclusive and fairer educational environment for everyone. For instance, a school district might provide workshops and seminars on techniques for handling ADHD in the classroom, like establishing structured routines and offering visual aids. Teachers can also engage in peer mentoring programmes or attend conferences to discover new interventions and techniques for assisting

individuals with ADHD. By continuously broadening their knowledge and skills, teachers can effectively address the unique needs of individuals with ADHD and establish a more inclusive learning atmosphere for everyone.

#### **6.3.4 Impact the School Governing Body**

The research highlighted the significance of inclusive school policies for individuals with ADHD, stressing the crucial role of the School Governing Body (SGB) in offering sufficient resources and support for teachers. Advocating for a more inclusive approach in the SGB policies is in line with the overarching aim of fostering an environment that meets the varied needs of all individuals. These policies not only foster a more inclusive and supportive environment for individuals with ADHD but also guarantee they get the academic support they need to succeed. By equipping teachers with the necessary tools and expertise to effectively assist these individuals, the SGB plays a crucial role in fostering an inclusive and fair educational environment for all learners. In addition, the study indicates that working together with the school governing body, teachers, families, and young learners is crucial for creating and executing effective plans to assist individuals with ADHD in an educational environment. Collaborating can lead to a beneficial influence on academic performance, behaviour, and overall well-being for individuals with ADHD. By working together, teachers, parents, and learners can identify unique needs and strengths to tailor interventions that support each person's learning style. By fostering transparent communication and offering support, the SGB can enhance the educational experience for all, regardless of their challenges or distinctive traits. This method can also assist in decreasing stigma and fostering a more inclusive and welcoming school atmosphere. By acknowledging and honouring the varied strengths and talents of individuals with ADHD, the school community can cultivate a feeling of inclusion and self-assurance among these individuals.

Moreover, by offering specific support and adjustments, teachers can assist individuals with ADHD in conquering obstacles and achieving their maximum capabilities. In the end, taking this collaborative and proactive approach can result in improved results for all individuals and help foster a more encouraging and caring school environment. By establishing a caring and encouraging atmosphere, we can help individuals with ADHD succeed in their academic and social endeavours. Collaboration among teachers, parents, and mental health professionals can lead to personalised plans that cater to the specific requirements of each individual with ADHD. By incorporating personalised learning opportunities, behavioural supports, and assistive technology, we can support individuals with ADHD to thrive in academic settings and beyond.

Together, we can overcome obstacles and establish a school community where every individual feels appreciated and assisted. For instance, an individual with ADHD might find it challenging to concentrate in a conventional classroom environment. However, with the assistance of their teacher, parents, and mental health experts, they can create a customised learning strategy that incorporates regular breaks and physical activities to enhance their engagement. Furthermore, implementing behavioural supports like positive reinforcement and clear expectations can assist in helping individuals manage their impulses and regulate their behaviour to create a positive learning atmosphere for all.

#### **6.4 Limitations of the Study**

Although this study has offered valuable insights, it is important to recognise its limitations. Considering the limited scope of the research and the time limitations experienced by participants, the generalisability of the findings may be restricted. In future research, it would be beneficial to target a broader and more varied sample to investigate possible differences in teacher comprehension influenced by their training and experience.

#### **6.5 Conclusion**

In conclusion, teachers wield a pivotal role in supporting students with ADHD in special needs classrooms. This study has highlighted the commendable efforts of teachers in adapting and employing various support strategies. However, it has also underscored the pressing need for comprehensive training, inclusive policies, and collaborative efforts to enhance the support system for students with ADHD. By establishing a foundation for future research and policy initiatives, this study adds to the ongoing discussion on developing more inclusive and supportive learning environments for all students.

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## APPENDICES

### Appendix A: Information letter and consent - Principal



B1014 Umchanguzo

Road

Kwamashu

4359

The Principal

K545, Kunatha Rd

Kwa Mashu K

4360

Dear Mr. B Gumede

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is Nhlakanipho Khumalo, and I am an M- Ed student at the University of Kwazulu-Natal, Edgewood campus, Pinetown. My student number is 219071769 in order for me to fulfill a degree requirement, I am expected to conduct a research project. My research project title is *“Teacher Support for Students with Attention Deficit Hyperactivity Disorder (ADHD) in a Special Needs School”*.

The study aims to determine the knowledge teachers in special education (LSEN) settings have of support techniques for ADHD students, to investigate the methods that teachers believe can best serve a student who has ADHD (ADHD), and to determine whether students with Attention Deficit Hyperactivity Disorder (ADHD) need support in the classroom. In this

regard, your school is selected for the study, as I believe that valuable information will be provided, in order to broaden knowledge on this concept.

We would be grateful for your permission to carry out the research at your school. Please be aware that this is not a review of the academic performance or professionalism of the participating teachers.

The names of all six participants (teachers) will be fiercely protected in accordance with the code of ethics established by the University of KwaZulu-Natal. Due to the fact that participation in the study is voluntary, individuals are allowed to discontinue at any moment without suffering any unfavourable effects. The participants will need to fill out a consent form, however. At the conclusion of the study, participants will get feedback in their best interests.

The research study requires data collection activities, and I will meet with participants for 15-20 minutes per day for three days upon commencement of the data collection process, which involves interviews and classroom observations.

My supervisor's contact details are as follows- Dr. V. Jairam, who is a Doctor in Education at a school of education, UKZN. Dr. V. Jairam can be contacted at 031 2601438/jairam@ukzn.ac.za.

Suppose you have any issues, questions, or concerns relating to the rights of the participants. In that case, you can contact Ms. Simangele Shezi, who is a senior administrative officer at UKZN Humanities and Social Sciences Research Ethics Office, on [0312603587/Shezis2@ukzn.ac.za](mailto:0312603587/Shezis2@ukzn.ac.za).

If you require any other information about this study upon its completion, kindly contact me at 0847536361/219071769@stu.ukzn.ac.za.

Yours Faithfully

Mr. Nhlakanipho Khumalo.

PRINCIPAL DECLARATION

I..... (*full name of principal*) at this moment grant permission to the researcher to conduct research in my school. I understand that participants have willingly agreed to participate in this research study and are at liberty to withdraw from the study at any time, so should they desire. I also understand that the name of the school, the name of the participants, and their responses will be kept confidential.

I permit the use of the following record device during the interview.

	Willing	Not willing
Audio recording		
Photographic equipment (if need be)		

SIGNATURE OF PRINCIPAL

DATE

.....

.....

## Appendix B: Information letter and consent – Participants



DEAR PARTICIPANT

RE: REQUEST FOR PERMISSION TO PARTICIPATE IN A RESEARCH STUDY

My name is Nhlakanipho Khumalo, a Master's candidate at the University of Kwazulu-Natal, Edgewood campus, Pinetown. The title of my research project is "*Teacher Support for Students with Attention Deficit Hyperactivity Disorder (ADHD) in a Special Needs School*". The study aims to determine the knowledge teachers in special education (LSEN) settings have of support techniques for ADHD students, to investigate the methods that teachers believe can best serve a student who has ADHD (ADHD), and to determine whether students with Attention Deficit Hyperactivity Disorder (ADHD) need support in the classroom. I am interested in interviewing you so as to share your experiences and observations on the subject matter.

Please take note that:

- Your participation is entirely voluntary;
- The information you supply will only be utilized for scientific study.
- You have the option to take part in the research, not take part, or discontinue taking part. You will not suffer any consequences for doing this.
- Your opinions will be given in this interview anonymously. Your identity or name will not be made public in any way during the study.
- The interview should last around (15-30 minutes).
- The interview record and other materials will be kept in a password-protected file that is only accessible to me and my superiors. According to

university regulations, it will be destroyed by burning and shredding after five years.

- Please sign the declaration that is attached to this statement if you accept to participate (a separate page will be provided for signatures).

I can be contacted at the College of Humanities, School of Education, University of KwaZulu-Natal, Edgewood Campus

Email: 219071769@stu.ukzn.ac.za

Cell: 0847536361

My supervisor's contact details are as follows- Dr. V. Jairam, who is a Doctor in Education at a school of education, UKZN.

E-mail- jairam@ukzn.ac.za.

Phone number- 031 260 1438

If you have any issues, questions, or concerns, you can also contact the UKZN Humanities and Social Sciences Research Ethics Committee. Contact details are as follows:

**HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557-Fax 27 31 2604609

Email- HSSREC@ukzn.ac.za

Thank you for your contribution to this research.

Yours Sincerely

Mr. Nhlakanipho Khumalo

DECLARATION

I..... (full name of participant) at this moment confirm that I understand the contents of this document and the nature of the research project, and I consent to participate in the research project.

I understand that I am at liberty to withdraw from the project at any time should I so desire. I understand the intention of the research. I, at this moment, agree to participate.

I consent/do not consent to have this interview recorded.

SIGNATURE OF PARTICIPANT

DATE

.....

.....

## Appendix C: Ethical clearance certificate from UKZN



27 July 2023

**Nhlakanipho Khumalo (219071769)**  
School Of Education  
Edgewood Campus

Dear N Khumalo,

Protocol reference number: HSSREC/00005825/2023

Project title: Teacher support on students with Attention Deficit Hyperactivity Disorder in a special school.

Degree: Masters

### Approval Notification – Expedited Application

This letter serves to notify you that your application received on 10 July 2023 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 27 July 2024.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Health Research Ethics Council (REC-040414-040).

Yours sincerely,



\_\_\_\_\_  
**Professor Dipane Hlalele (Chair)**

/dd

#### Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 8350/4557/3597 Email: [hssrec@ukzn.ac.za](mailto:hssrec@ukzn.ac.za) Website: <http://research.ukzn.ac.za/Research/Ethics>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Wavertree

**INSPIRING GREATNESS**

## Appendix D: Ethical clearance certificate from DoE KZN



**KWAZULU-NATAL PROVINCE**  
EDUCATION  
REPUBLIC OF SOUTH AFRICA

**OFFICE OF THE HEAD OF DEPARTMENT**

Private Bag X9137, PIETERMARITZBURG, 3200  
Anton Lembede Building, 247 Burger Street, Pietermaritzburg, 3201  
Tel: 033 392 1051

Email: Phindile.duma@kzndoe.gov.za

Enquiries: Mrs B.T. Ntuli

Ref.:2/4/8/7497


Mr Nhlakanipho Khumalo  
B1014 Umchanguzo Road  
KWAMASHU  
4359

Dear Mr Khumalo

### PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: "TEACHER SUPPORT ON STUDENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) IN A LSEN SCHOOL..", in the KwaZulu-Natal Department of Education institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the Intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from 13<sup>th</sup> June 2023 to 31<sup>st</sup> December 2025.
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Mrs Buyi Ntuli at the contact numbers above.
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

  
Head of Department: Education  
Date: 13<sup>th</sup> June 2023

GROWING KWAZULU-NATAL TOGETHER

## **Appendix E: Data production tools**

### INTERVIEW SCHEDULE RESEARCH INSTRUMENTS

A case study will be used to generate data using these three methods, namely semi-structured interviews, structured observation and unstructured questionnaires. This is an empirical study. Three data generation methods are over three days; with each participant, it will be two days, and on the last day, the researcher and all the participants will have their last session as a group. All data will be generated face-to-face with the participants.

#### Session One

Through semi-structured interviews will take place at school from 13:30 to 15:00 since special schools knock off at 13.30. Each participant will be given 30 minutes for an interview and 10 minutes per question to respond freely to the questions asked by the researcher. The tape recorder will be used to record participant's responses.

The first 10 minutes will be given to each participant to answer this question.

“What do you know about support techniques for special education students with Attention Deficit Hyperactivity Disorder (ADHD)”?

Each participant is expected to answer freely about their knowledge of support techniques; this will help the researcher to find out if teachers are well equipped for support strategies for ADHD students.

In the second 10 minutes, the participant will have to answer this question.

“What methods do you use in your classroom to support ADHD students”?

Here, participants will be expected to share different support strategies they use to support their ADHD students.

In the third and last 10 minutes of the interview, participants are expected to answer this question.

“Do students with Attention Deficit Hyperactivity Disorder (ADHD) need support in the classroom”?

Participants are expected to respond based on their knowledge and experience in being in a classroom and teaching these kinds of students. All the responses of participants will be recorded and later transcribed.

### Session Two

As a researcher, I will spend 20 minutes in the classroom doing structured observation of each participant. As I will be observing, I will be going through a checklist which contains:

- Do they know of ADHD/ How they teach ADHD students?
- Support strategies used by teachers/ are they the same or different/ appropriateness of support strategies
- Are the support strategies being employed working for these students?
- Is there intervention and support for ADHD students?

The use of structured observation will assist the researcher in generating information regarding teacher knowledge of supporting students and the effectiveness of the support strategies provided to the learners in the special education classrooms.

### Session Three

All the participants will be requested to meet at the same venue as the researcher. Each participant will be handed a questionnaire consisting of open-ended questions such as:

- What do you know about support strategies for students with ADHD?
- Why do you feel the need to support ADHD students in your classroom?
- What techniques do you use in your class to support these students?

## **Appendix F: Semi-structured questionnaire (open-ended questions)**

During data collection, participants had to fill in a questionnaire which consisted of the following open-ended questions. To give participants an opportunity to answer freely and share all their experiences of supporting ADHD students. Research questions were developed from the three main research questions.

### **1. What do teachers know about support techniques for special education students with Attention Deficit Hyperactivity Disorder (ADHD)?**

- a) What was the main reason you chose to teach students in a special needs school?
- b) How do students behave in your classroom?
- c) What do you understand about ADHD?
- d) Where did you gain knowledge of supporting ADHD students?

### **2. What methods do teachers believe can best serve a student who has ADHD?**

- a) What was the main reason you chose to teach students in a special needs school?
- b) How do students behave in your classroom?
- c) What do you understand about ADHD?
- d) Where did you gain knowledge of supporting ADHD students?
- e) What techniques do you implement in your classroom to support the students with ADHD?
- f) How effective are the techniques you use in the classroom?

### **3. Do students with Attention Deficit Hyperactivity Disorder (ADHD) need support in the classroom?**

- a) Are the support techniques effective for all the students with ADHD in your classroom, or is each student supported differently through the implementation of different techniques?
- b) What have you done differently to support the students with ADHD in your classroom?
- c) Has it been an easy or challenging journey to teach and support these students?
- d) How has teaching ADHD students impacted your teaching?

- e) Do you get support from the school therapist, social worker, School Governing Body (SGB), School Based Support Teams (SBST), and District Based support teams (DBST) to support ADHD students?

## Appendix G: Turnit in report

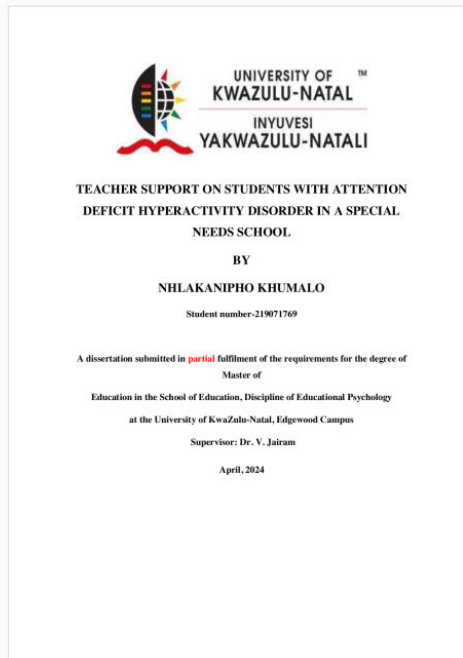


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Character count: 131,206  
Submission date: 28-Feb-2024 06:48PM (UTC+0200)  
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STUDENT PAPERS

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### PRIMARY SOURCES

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1

Frank J. Sansosti, Robert E. Cimera, Lynn C. Koch, Phillip Rumrill. "Strategies for ensuring positive transition for individuals with attention-deficit/hyperactivity disorder", *Journal of Vocational Rehabilitation*, 2017

Publication

2%

2

Wafaa El Zaatari, Imad Maalouf. "How the Bronfenbrenner Bio-ecological System Theory Explains the Development of Students' Sense of Belonging to School?", *SAGE Open*, 2022

Publication

1%

3

Rocio Herrero Romero, James Hall, Lucie Cluver. "Exposure to violence, teacher support, and school delay amongst adolescents in South Africa", *British Journal of Educational Psychology*, 2019

Publication

1%

4

Michelle E. Kiger, Lara Varpio. "Thematic analysis of qualitative data: AMEE Guide No. 131", *Medical Teacher*, 2020

Publication

1%

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## Appendix H: Editor's letter



Website: [www.chiefeditors.net](http://www.chiefeditors.net)

Email: [info@chiefeditors.net](mailto:info@chiefeditors.net) or [boldwin@chiefeditors.net](mailto:boldwin@chiefeditors.net)

Cell: 063 022 3162 or 072 492 6144

---

Dear Sir/madam

**Re: Confirmation of editing and proofreading**

This letter informs the responsible authorities that our team proofread and edited the work authored by **Nhlakanipho Khumalo (219071769)** to the best of its ability. Our editing involves spelling check, punctuation, grammar, sentence construction, word reduction, cross reference citations, basic formatting (general layout), presentation style, indexing, and other mechanics of the English language. No technical alterations have been made.

Corrections were made using track changes, which have been clearly outlined for the author's reference. It is the onus of the author to accept or reject the suggested changes.

Please do not hesitate to contact us on the details provided above for more information.

**Disclaimer:** The editor will not be held responsible for any errors introduced due to the changes made after editing.

Yours,

B. Mutsvene (Coordinator)

Affiliation: International Affiliation of Writers Guilds (IAWG)

IAWG