

**GRADE THREE TEACHERS' EXPERIENCES OF LEARNERS  
PERCEIVED TO HAVE ADHD IN SOWETO MAINSTREAM  
PRIMARY SCHOOLS**

**by**

**Elijah Krone Maema**

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**Supervisor: Prof Ramodungoane Tabane**

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Kodumela moepathutse gago lehumo le letšwago kgauswi

**DECLARATION OF ORIGINALITY**

I declare that **“GRADE THREE TEACHERS’ EXPERIENCES OF LEARNERS PERCEIVED TO HAVE ADHD IN SOWETO MAINSTREAM PRIMARY SCHOOLS”** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

A handwritten signature in black ink, appearing to read 'EK Maema', written in a cursive style.

**Signature:**

**Mr EK Maema**

**DATE:**

**18 April 2021**

**TO BE AWARDED POSTHUMOUSLY**

## **DEDICATION**

**To my family, thank you for the support through this journey.**

### **Gratitude goes to**

- **My supervisor Prof Ramodungoane Tabane, thank you for your guidance.**
- **UNIVERSITY OF SOUTH AFRICA (UNISA), thank you for the financial support.**
- **Gauteng Department of Education, Schools and all the participants in this study. This is possible because of you.**

## ABSTRACT

Attention-deficit/hyperactivity disorder (ADHD) also known as hyperkinetic disorder is a well-recognised neurodevelopmental disorder) that affects approximately 5.9% to 7.1% of children and adolescents. ADHD is one of the most common psychiatric disorders of young people, affecting primary school children. ADHD symptoms are associated with impairment in academic, behavioural, social, and emotional functioning, generally resulting in substantial difficulties in school settings. Specifically, learners with ADHD or those perceived to have it are at significantly higher risk for academic underachievement, grade retention, identification for special education services, and school drop-out. The purpose of the study was to explore grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools with the aim of harvesting intervention strategies (if any) employed in teaching learners perceived to have ADHD. This study employed a qualitative research approach with a case study method employing semi-structured interviews, focus group and an ADHD-specific knowledge and attitudes of teachers (ASKAT) open ended questionnaire section. The findings of this study indicate that lack of training teachers on neurodevelopmental disorders such as ADHD. Further that teacher experience is characterized by feelings over being overwhelmed exacerbated by not know how to support the learners perceived to have ADHD, Stereotyping and labeling the learners; poor time management and general lack of knowledge of ADHD. They however employ various interventions from their day-to-day experience and not necessarily evidence-based intervention that they received.

**Keywords:** Distractibility; disorder; inattention; impulsivity; hyperactivity

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## CHAPTER ONE: STUDY INTRODUCTION

### 1.1 INTRODUCTION

Attention-deficit/hyperactivity disorder (ADHD), also known as hyperkinetic disorder, is a well-recognised neurodevelopmental disorder characterised by behavioural symptoms of inattention and/or hyperactivity-impulsivity (APA, 2013) that affects approximately 5.9% to 7.1% of children and adolescents (Willcutt, 2012). ADHD is one of the most common psychiatric disorders among young people, affecting primary school children (Arruda, Querido, Bigal, & Polanczyk, 2015). Children and adolescents diagnosed with ADHD display developmentally inappropriate levels of inattention and/or hyperactivity-impulsivity that are associated with clinically significant impairment in academic and/or social functioning (APA 2013; Barkley, 2015). ADHD affects millions of school-going age learners, and it is currently the most diagnosed psychological disorder of children worldwide (DuPaul & Stoner, 2014).

ADHD is a chronic, lifelong disorder because individuals with ADHD have an increased risk for a litany of social problems (DuPaul & Stoner, 2014). The social problems may vary. For children, risks include lower academic achievement and increased risk for learning disabilities (LD), conduct disorder, or depression. Additionally, children with ADHD are most likely to encounter serious difficulties in social settings, which can result in social isolation (DuPaul & Stoner, 2014). As children with ADHD enter adolescence, they are more likely than their peers to experience incarceration, contract a sexually transmitted disease, or be involved in multiple car accidents.

ADHD continues to be the current diagnostic label for children and adults presenting significant problems with attention and typically with impulsiveness and excessive activity as well (Barkley, 2015). Children with ADHD represent a rather heterogeneous population that displays considerable variation in the degree of members' symptoms, age of onset, cross-situational pervasiveness of those symptoms, and the extent to which other disorders occur in association with ADHD (Barkley, 2015).

An important distinction should be made at the outset between symptoms and impairments. The term “symptom” in this instance refers to a specific behaviour/s, for an example, switching from one uncompleted activity to another, or a set of behaviours that significantly cover together, for instance, inattention, and are believed to represent a dimension of a mental disorder (Barkley, 2015). The term symptoms must be distinguished from that of “impairment” because the two are often confused in clinical discussions of disorders (Willcutt, Nigg, Pennington, Solanto, Rohde, & Tannock, 2012). Impairments are the consequences or outcomes of symptoms or symptom classes, such as retention in class or grade, failure to complete high school, involved in vehicle crashes, teen pregnancy, suspension of drivers’ licenses, or being arrested for criminal offences (Willcitt, et al. 2012).

ADHD symptoms are associated with impairment in academic, behavioural, social, and emotional functioning, generally resulting in substantial difficulties in school settings. Specifically, learners with ADHD or those perceived to have it are at significantly higher risk for academic underachievement, grade retention, identification for special education services, and school drop-out (Barkley, Fischer, Smallish, & Fletcher, 2006; Frazier, Youngstrom, Glutting, & Watkins, 2007; Kent, Pelham, Molina, Sibley, Waschbusch, Yu, & Karch, 2011). Looking at ADHD in schools and/or classroom settings, with reference to identification, assessment, and intervention strategies, there is information addressing a few aspects in relation to what studies have come up with.

To be able to assess the meaning of the high population rate of ADHD, one must have an idea of how common behavioural abnormalities and learning disorders (LDs) are there in the general population of children, adolescents and adults (Gillberg, Fernell, & Minnis, 2014). It is estimated that in most western countries, between one in four and one in six children who start school have a degree of behavioural problems that need some form of support, treatment and intervention (Gillberg, et. al 2014). In certain countries where child psychiatry services may be less well developed, or less accessible, the prevalence rate of attendance will of course, usually be lower than expected (Gillberg, et al., 2014). It is indicated that ADHD is an impairing, often persistent neurobiological disorder of high prevalence that is caused by a complex interaction between genetic and environmental risk

factors (Faraone, Asherson, Banaschewski, Biederman, Buitelaar, Ramos-Quiroga, & Fliers, 2015). According to Bakare (2012), the prevalent rate of ADHD does not significantly differ between countries in Europe, Asia, America and Africa, and that evidence exists that ADHD is as prevalent on the African continent as in western countries.

Most studies examining educational functioning in children and adolescents with ADHD had been cross-sectional; that is, they have looked at the academic performance or achievement data collected on one occasion, for an example, meta-analytic findings from cross-sectional studies indicate that the academic achievement of learners with ADHD is 0.60 to 0.70 standard deviations below their non-ADHD classmates (Frazier, et al., 2007). Furthermore, children and adolescents with this disorder have difficulties interacting with their peers and adult authority figures. Moreover, they have problems building and sustaining friendships, are more likely to be rejected by peers than their classmates without ADHD and may have emotional difficulties related to coping with this disorder (Hodgens, Cole, & Boldizar, 2000; Stormont, 2001).

Epidemiological (that is, population surveys) studies indicate that approximately 3% to 10% of children can be diagnosed with ADHD (Centre for Disease Control and Prevention [CDC], 2010), with a medium estimate of 6.8% across multiple national surveys (Centre for Disease Control and Prevention, 2013). There is an approximately 11% prevalent rate of children in the United States who are reported by their parents to have been diagnosed with ADHD at some point in their lifetime (Visser, Danielson, Bitsko, et al., 2014). Although the prevalence rate in South Africa has not yet been officially determined, the ADHD support group, such as Attention Deficit Hyper/activity Association of Southern Africa (ADHASA) together with other support groups estimate that about 10% of South African children display signs and symptoms associated with ADHD (Muthukrishna, in Lloyd, Stead & Cohen, 2006). This is a significant difference from Willcutt (2012) asserting that ADHD is a relatively high-incident neurodevelopmental disorder that affects approximately 5% to 7% of children worldwide. Therefore, in a classroom of about 25 to 30 children, between 1 to 3 learners may have ADHD (Barkley, 2015). In the township mainstream primary schools' classroom situations of around 45 to 60 learners' classroom enrolment, the ratio is that there could be more learners with ADHD.

There are cases of ADHD affecting more boys than girls, with a ratio ranging from 2:1 to 5:1 depending on the classroom setting and circumstances (Barkley, 2015). The prevalence rate of ADHD on gender also differs in terms of the population rate assessment and the referral of both boys and girls to professional has an impact on this. There are more boys who are referred as they mostly display disruptive behaviours, for example, been non-compliant, conduct disturbance than girls who usually display patterns of been more reserved, isolated and non-disruptive (DuPaul & Stoner, 2014). It is possible that neurobiological factors could account for gender differences in ADHD prevalence rate. There are also data to suggest that girls have been less likely to be referred for diagnoses and treatment because they may display lower levels of aggression and/or defiant behaviour/s than boys with ADHD (Gershon & Gershon, 2002). Therefore, there may be more girls in classroom settings than are currently identified.

Although individual learners with ADHD can be very successful in later in life, without early identification and proper interventions, ADHD can have serious consequences, including failure at school, low self-esteem, depression, behavioural problems, and substance abuse. Early identification and interventions increase the likelihood of a positive long-term outcome. It is important to note that, despite their difficulties, learners with ADHD have positive personality characteristics, particularly those who receive early appropriate intervention and support from school and home settings. Therefore, teachers and parents of such learners with ADHD or those perceived to have ADHD need to be aware and possess intervention skills about this disorder and other disorders associated with ADHD so that they may be able to assist such learners at school, classroom and home settings.

Teachers in particular must have an extensive repertoire of skills so that they can deliver educational instructions in a manner that allows them to meet the academic, social and behavioural needs of the increasing diverse set of learners inclusive of those they perceive to have ADHD (Lane, 2007; Walker et al., 2004). Learners with ADHD or those perceived to have it exhibit chronic behaviour/s difficulties that deleteriously impact on their academic and social functioning in school settings. These difficulties do not only impair learners' performance, but also present significant challenges to teachers, school psychologists and other school

professionals dealing with this population of learners with ADHD (DuPaul& Stoner, 2014).

## **1.2 BACKGROUND**

South Africa's education system espouses for inclusive education, as detailed in White Paper 6 on Inclusive Education (Department of Education, 2001), that is, schools are to be opened to all school-going learners despite their varying abilities and educational needs. Therefore, all teachers are expected to manage and supervise diverse learners in classrooms effectively and find appropriate classroom intervention strategies to apply in their teaching including teaching learners with diverse disorders, inclusive of ADHD.

In a quest to put inclusive education into practice, teachers need be equipped with intervention skills to accommodate and recognise the unique diversities of all the learners in classroom and school settings. According to the Education White Paper 6 (Department of Education, 2001), teachers are supposed to render educational services to learners with diverse learning styles, life, personal experiences and abilities to nurture those which the learners already possess as individuals.

Throughout the history of education in South Africa, disparities between black and white educational expenditures have been nothing but scandalous (Nkomo, 1990). The status quo remains, however in the socio-economic status stance between the township and suburban or Model C schools and private schools. In this instance, race is not a main issue. However, the townships schools like those in Soweto are predominantly black operating on the former apartheid conditions. Schools in the townships had been historically disadvantaged unlike the suburban or former Model C schools where the pre-1994, the dawn of democracy, the then national government spend about R128.00 on a white school child as compared to R17.00 on a black school child during the 1950s. It then went up to R1702.00 on a white school child as compared to R169.00 on a black school child during the 1980s (Nkomo, 1990). Therefore, educational resources differed tremendously to the benefit of the white education system. Suffice to say, that the extent of the damage created is so severe that there is no remedy short of a radical reformulation of the entire education system.

Teachers in the current system and mostly in the foundation phase received their training pre-1994 and mostly in the now-defunct teacher colleges. The training of the teachers was also different with black aspiring teachers trained in poor resourced colleges (Jansen, 1988; Nkomo, 1990). Ndlovu (2011) concurs that teachers from the white communities amounted to 96% of them having a teaching diploma qualification as compared to teachers from the black communities who stood at only 15% certified as teachers owing to their poor qualification.

Specialised teaching focusing on special educational needs which also includes training in ADHD was also focused on the minority of the population as evidenced by a large number of special schools that only catered for whites' colleges (Nkomo,1990). To this date in the 21<sup>st</sup> century, township school teachers are faced with challenges and difficulties in dealing with learners from different backgrounds. The teachers are also faced with having to teach learners with diverse educational needs, in particular learners of different disorders including those that are either diagnosed or exhibit signs and symptoms of ADHD without adequate training particularly township teachers.

In the South African education system, schooling hours can be between six to eight hours a day, thus translating to approximately 30 to 40 hours of schooling in a week. These are hours that are arguably the most challenging and difficult in classroom environments for learners with ADHD (Reid, 2012). It is during those hours that learners with ADHD or those perceived to have it are expected to sustain their attention, inhibition of impulsive behaviours and are also required to stay seated for much of the day.

Learners spend most of their time in classrooms and other school settings. That is where they are expected to follow rules, act in socially proper ways, participate in academic activities, and refrain from interrupting the learning process and development or activities of others (Kleynhans, 2005). During these contact and/or teaching times, teachers must teach learners skills on how to behave in a manner that meets organisational, cultural and social expectations (Barkley, Murphy, & Fischer, 2008; DuPaul, & Stoner, 2003). However, the work of teachers becomes much more demanding when there are learners in classroom settings that have ADHD or exhibit signs and symptoms thereof.

The advantage of the hours spent at school especially in Grade 3 classroom settings, is that teachers in that Grade level have a unique opportunity during those contact hours to observe: (a) learners' behaviours in a classroom context across an extended period of their teaching time; (b) the degree to which symptomatic behaviours impair academic performance and interpersonal relationships. According to Reid (2012), teachers can provide very important and significant information regarding the degree to which behaviours deviate from developmental expectations and impact on the academic and social functioning of learners with ADHD. This could be very appropriate for in Grade 3 teachers.

It is imperative that township Grade 3 teachers be adequately prepared to teach and meet the Grade 3 learners' individual expectational needs and diverse educational challenges and difficulties, including those with ADHD or those perceive to have it. Learners in general may acquire their behaviours orientation from the daily actions of their Grade 3 teachers when they interact with the teachers within given classroom and school settings. Then learners tend to emulate the behaviours of their Grade 3 teachers in particular, as well as other school officials with whom they are in contact with during classroom and school hours on daily basis.

ADHD presentations may in many ways be overlooked or even be passed off as normal up to a particular age despite the learners' behaviour being disruptive in the classroom, therefore potential of being missed and their academic performance suffering owing to this normalisation. This seeming inability presentation to keep up, both at school and socially, happens because important foundational learning building blocks were missed and lost, such as the initial steps needed for basic reading, writing and numeracy. These are usually missed during periods of inattention (Sonna, 2005). Social and academic building blocks, such as the acquisition of rules for appropriate behaviour, and the ability to remember sequences, as when doing school and classroom projects and tasks or washing of hands after feeding the pet, for instance, are also affected by the inability to stay focused. This is thought to happen because the part of the learner's brain responsible for attention and focus is not working in sync with the source of incoming information, that is, the learner's brain is either working faster or slower than the teacher's instructional voice speed and modulation (Levine, 2002).



The school and classroom settings are therefore often the places where ADHD-related behaviours become apparent. Teachers notice clear differences between the learning styles and behaviours of their learners, which may suggest that certain learners need to undergo assessment by trained professionals. The conclusion is often drawn that the learner may need specialised attention (Rief, 2005), owing to uncompleted classroom-work, misunderstood instructions and forgotten tasks. It is at this stage that teachers must first become aware of ADHD-related indicators, and the realities that affect every aspect of the learner/s' life both at school, in classroom and socially. At that stage, teachers find themselves faced with serious dilemmas, such as whether or not they should increase discipline or change disciplinary methods, and whether or not to listen to all the well-meant advice given to them by the trained professionals, the media and well-meaning individuals (Barkley, 2015).

In 39 years of the researcher's career as a post-level 1 teacher and passed through the ranks of head of department (HoD), deputy principal and principal at various mainstream primary schools, the researcher's experience during his interaction with the teachers expressed frustration by the teachers owing to lack of skills on how to address learners with different disorders, including ADHD. They believe that behavioural problems in classrooms and school settings should be handled by professionals such as, educational psychologists, occupational therapists, speech therapists, and social workers.

Grade 3 teachers' lack of ADHD knowledge and application of intervention strategies in their classroom supervision and management can be a serious detriment to their teaching. This might be the case for those teaching learners with ADHD or perceived to have ADHD in Grade 3 classroom settings in township mainstream primary schools. Brouwers and Tomic (2000) found that teachers' self-efficacy for classroom supervision and management has a longitudinal effect on teachers' "burnout". Grade 3 teachers are expected by their education department to carry out a range of various teaching activities. These include extra mural activities, (for example sports activities), and co-curriculum activities (for example, subject meetings and workshops) in developing their learners holistically, in particular Grade 3s in the context of this study, and so on. This can contribute to the teachers' burn-out or add to it.

Therefore, teachers who are not aware about ADHD and teaching learners with this disorder or perceived to have this disorder and lack supervision and managerial skills to deal with these learners might feel efficacious. Teachers who elect to teach learners with ADHD or perceived to have it, and at risk for emotional and behavioural disorders report serious challenges and difficulties in managing them efficiently (Walker, Ramsey, & Gresham, 2004). Consequently, it is important that township Grade 3 teachers become aware and acquire knowledge of ADHD, and to be able to use a range of intervention strategies to prevent behavioural challenges and difficulties from occurring in the first place. Then Grade 3 teachers will be able to respond effectively and efficiently to challenges and difficulties in their classrooms settings as and when they arise.

With the researcher's knowledge of ADHD through the ADHASA, on how learners with ADHD and those exhibiting symptoms of it are treated, of interest for this study is whether mainstream primary school teachers in Grade 3 are aware about ADHD and other disorders associated with it, and what interventions strategies (if any) do they use when teaching learners with ADHD or perceived to have ADHD. Furthermore, ADHASA conducts constant programmes and hosts workshops, seminars and annual conferences to raise awareness and share knowledge of ADHD. These workshops are meant by invitation for teachers, parents, guardians and community members. These invited attendees have revealed that some of the teachers, especially those from township mainstream primary schools, lacked the necessary basic knowledge of ADHD to deal with these type of learners, as well as intervention strategies when teaching learners with ADHD or those perceived to have it in their classroom settings.

### **1.3 RATIONALE FOR THE STUDY**

Grade 3 teachers need support and/or assistance when teaching learners with ADHD or perceived to have it. Grade 3 teachers need to be well-equipped and confident from the very first day of the year when they come to a Grade 3 classroom full of learners with various educational needs. The reason for the study was to explore Grade 3 teacher experiences when teaching learners with ADHD or perceived to have ADHD. According to Holz and Lessing (2002), some studies have shown that ADHD training was not part of teachers' initial training. In other words, teachers' initial training curriculum does not include basic psychology on how to

treat learners with diverse educational and behavioural needs, such as ADHD and other disorders.

#### **1.4 RESEARCH PROBLEM**

Given that learners with ADHD or those perceived to have it are found in nearly every school and classroom settings and experienced a wide range of difficulties, there should be something of interest to all professional groups in this context. ADHD often begins early in a learner's life, and typically has a chronic course, and is frequently associated with long-term psychosocial and/or educational impairment. Therefore, it is vital to identify learners with the disorder as early as possible so that intervention can begin prior to school entry (DuPaul & Kern, 2011). Learners who display inattentive and disruptive behaviours present significant challenges to educational professionals (DuPaul & Stoner, 2014). In fact, many learners who exhibit behaviour control difficulties in classroom settings are diagnosed as having ADHD. Learners with ADHD or perceived to have it are at risk for chronic academic achievement difficulties, the development of antisocial behaviour and problems in relationships with peers, teachers and parents (DuPaul & Stoner, 2014).

More importantly, the education department governing schools' eligibility must magnify the need for teachers to receive training in identification, assessment and dealing with ADHD in schools. An attempt should be made to address the problems associated with ADHD from a school-based perspective while recognising the need for a team effort among teachers, parents, communities-based professionals. DuPaul and Stoner (2014) purport that specific focus by teachers should be on how to (1), identify and assess learners who might have ADHD; (2) develop and implement classroom-based intervention strategies for learners with ADHD or those suspected to have it; (3) identify and provide early intervention for those learners at risk for ADHD; and (4) communicate with and assist parents, school professionals and physicians when strategies are employed to treat this disorder.

Meeting the needs of learners with ADHD presents significant challenges to educational personnel. The hallmark characteristics of this disorder, that is, inattention, impulsivity and overactivity, often lead to disruptions of classroom decorum, academic underachievement, and difficulties making and keeping friends (DuPaul, & Stoner, 2014). Therefore, in a mainstream classroom of 40 to 60 learners

in a case of township classroom setting, a teacher would be faced with at least two to five learners who have notable difficulties attending to instructional activities and complying with classroom rules and school rules and regulations. The academic performance of most learners with ADHD is deficient owing to their poor study habits, lack of work completion, and inconsistent accuracy on seat work, homework, and tests. DuPaul and Kern (2011) report that about one-third of these learners were significantly below average in academic skills, and therefore, were identified as having learning disabilities (LD).

Preliminary research conducted by the National Institute of Mental Health (NIMH, 2002), found that teachers, parents and communities who were inexperienced with regards to ADHD, had the need for various intervention strategies other than those that focused mainly on the medical treatment of children diagnosed with ADHD. This viewpoint is supported by Sonna (2005), who maintained that the emotional and other factors support of teachers, parents, and communities, whose children might find it difficult to be accepted by their peers owing to ADHD related behaviours, was extremely important. This was often the focus of support structures needed for teachers, in particular those in township mainstream primary school settings.

## **1.5 RESEARCH QUESTIONS**

What are grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools?

### **Sub-questions are as follows:**

- What classroom experiences do grade three teachers have on ADHD?
- What criterion do grade three teachers use in identifying learners perceived to have ADHD?
- Which interventions (if any) do grade three teachers employ in helping learners perceived to have ADHD?
- What external support do grade three teachers get to be able to deal with learners perceived to have ADHD?

## **1.6 PURPOSE OF THE STUDY**

The purpose of the study was to explore grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools with the aim of harvesting intervention strategies (if any) employed in teaching learners perceived to have ADHD.

## **1.7 RESEARCH APPROACH**

This study employed a qualitative research approach. It considered the purpose/s of the empirical study and carried out in a form of a field research which, according to Neuman (2005) is often qualitative and descriptive in nature. Qualitative research required direct involvement of the participants (Le Vos, 2002), which gave the study an exploratory, investigative and evaluative nature (Neuman, 2005). Furthermore, qualitative research was used to collect sensitive data to both the natural social context under study and the perspectives of people and aims at producing a holistic understanding of some social reality (Denzin & Lincoln, 2005).

## **1.8 RESEARCH DESIGN**

Research design is an overall process of using one's imagination as well as the strategies and tactics of science to guide the collection and analysis of data (Abbot & McKinney, 2013). Qualitative designs such as field research and content analysis are unparalleled in providing rich and descriptive data on processes. These qualitative observational designs represent unique dimensions on how data are collected by the researcher on or about people (Abbot & McKinney, 2013). In addition, Matthews and Ross (2010) indicated that based on the research design, the researcher could then go on to choose one's data collection methods. In other words, designing a research meant that the researcher could go back to the research question/s and think about what the researcher had hoped to be able to do with the data collected to be able to address those research question/s.

### **1.8.1 Case studies**

Case studies are a descriptive account of academic and behavioural outcomes, history and other relevant factors that clearly did not stand out from its context.

According to Yin (2003), it could assist the researcher to re-look at the research topic broadly as such a technique that afforded the researcher an opportunity to refocus the research topic from the perspective of all participants. A case study also afforded the researcher an opportunity to study within the topic's appropriate context, gathered from multiple sources of relevant evidence. According to Cohen, Manion and Morrison (2002), a case study is a specific instance that is frequently designed to illustrate a more general principle, which meant that it was a study in action. In this study, the researcher selected grade 3 teachers from four township mainstream primary schools in Soweto to explore their experiences in teaching learners perceived to have ADHD.

### **1.8.2 Population sampling**

Sampling is a method of identifying and selecting subgroups, or people, to represent a much larger population in its entirety (Merle & Charles, 2005). It referred to the method used by the researchers in their studies to select participants for their studies. The strategy for selecting the sample had a bearing on the quality of the data and the inferences that were made from it. The sampling activities began with an identification of groups, settings and individuals where (and for whom) the process being studied were most likely to occur (Denzin & Lincoln, 2000).

The study was conducted at four township mainstream primary schools in Soweto in Gauteng Province (GP), in particularly schools with grade 3 classroom settings. The reason/s for the selected grade 3s was because grade 3 is a bridge towards Grade 4 which is an intermediate phase. In grade 3 learners begin to experience the cusp of change from grade 3 to grade 4. It involved the changeover in phases that included a substantial increase in the number of subjects being taught as well as beginning to use an additional language as a Language of Learning and Teaching (LoLT). Up until the end of grade 3 learners had been receiving tuition and interacting with their grade 3 teachers in their home language. Therefore, it was at this developmental stage that early identification and interventions on learners with ADHD or perceived to have ADHD might build on a good foundation for a lifelong process of learning towards the grade 3 learners' future.

Purposive sampling technique was employed to selected participants. Purposive sampling was preferred because it was a process of selecting a portion of the study population for a specific purpose, and made observations, predictions or estimates on the smaller group or sample, which was informative, and generalisable to the findings to the study population (Neuman, 2005). Twenty-four township mainstream primary school grade 3 teachers in the foundation phase from four Gauteng Province districts, namely Johannesburg North (JN), Johannesburg Central (JC), Johannesburg West (JW) and Gauteng West (GW) were purposefully selected as participants.

From each district, one school was selected, and six teachers requested to take part in the study. This solely depended on the number of Grade 3 classrooms each school had. That selection dependency was based on requesting respective districts to supply identified and recommended such township schools for the purpose of focus group interviews because those districts were in possession of names of such schools with high grade 3 classroom numbers. The researcher then selected the researcher's choice from the given lists of schools by the respective districts. From the given lists, the researcher looked for schools with six and more grade 3 classrooms' settings for the purpose of focus group interviews.

Participants were purposefully selected and had to fulfil the various qualifiers. The researcher had to establish if the participants had the required foundation phase teaching qualifications, such as a grade 12 National Senior Certificate, a three (3) years teachers' foundation phase diploma and/or any other authentic qualification/s for the teaching of foundation phase learners, as well as a number of teaching experience in teaching in a grade 3 classroom setting. Participants had to have taught for three years and more in particular, the teaching of the subject life skills, and whether the participants had some form of training or studied psychology, learners' counselling, or previously attended at ADHASA workshops, conferences or seminars on ADHD or any other formation that dealt with ADHD. It was also determined if participants were members of the School Based Support Team (SBST) and/or any school psychological, counselling or mental health organisation outside of the school.

### **1.8.3 Data generation strategies**

#### **1.8.3.2 Semi-structured interviews**

Data collection was also generated by means of individual semi-structured interviews. The term 'interview' is defined as an application of a one-to-one interaction (Rug & Peter, 2007). This method of data collection made it possible for the researcher to be able to get a meaningful or purposeful expression of the participants' experiences and views (Gubriun & Holstein, 2002).

Semi-structured interviews were used for data collection. The interviews took 60 minutes per session after contact time or any other times agreed upon between the researcher and the participants outside of the participants' teaching times. This was to make certain that the researcher or the process of collecting data did not hamper or disturb the participating grade 3 teachers in class with their teaching during contact times.

#### **1.8.3.2 Focus group interviews**

Focus group interviews are compatible with the qualitative research approach and offer direct opportunities for direct contact with the participants on the topic at hand, offering a distinct advantage for data collection. The use of a question route that was engaging, thought-provoking and relevant to both the participating grade 3 teachers and the study enabled the researcher to gain various perspectives on the challenges and difficulties faced and experienced by the teachers concerned (Kreuger & Casey, 2000). Kreuger and Casey (2000) advised on the kind of questions and sequences these questions should follow. This meant that the questions and sequences thereof should be at the level of the participants so that the participants must feel comfortable and relaxed during the interviews and for the participants to give their full and valuable experiences when responding to questions.

The FGD were audio-recorded for a maximum time period of 90 minutes per session, and then transcribed verbatim (Mouton, 2002; Rudestam & Newton, 2001). Before audio-recording the participating grade 3 teachers, the researcher requested



for the participants' permission to audio-record the conversation or discussion with reference to the research topic.

### **1.8.3.3 ADHD-specific knowledge and attitudes of teachers (ASKAT) questionnaire**

Mulholland, Cumming and Jung (2015) developed the ADHD-specific knowledge and attitudes of teachers (ASKAT) questionnaire administered in this study (see appendix M). The ASKAT questionnaire is divided into four parts, namely, part A, B, C and D. Part A had demographic questions with 11 items; part B had Scale for ADHD-specific knowledge (SASK) with 20 items; part C had Scale for ADHD-specific attitudes (SASA) with seven items that consisted of a number of sub-sections and part D had open-ended questions comprising of five open-ended questions. As this study is qualitatively inclined, part D was deemed appropriate because this section allowed participants to explain themselves openly about their respective experiences of learners perceived to have ADHD. Therefore, they shed vital information with regard to participants' knowledge and attitudes in teaching learners perceived to have ADHD.

### **1.8.3.4 Data analysis strategies**

Data analysis is a process involving "breaking up" data into manageable themes, patterns, trends and relationships, and understanding the various constitutive and essential elements through an inspection of the relationship between concepts, constructs or variables (Mouton, 2002). Data analysis in qualitative research is continuous, emerging and interactive (Mouton, 2002). Focus group and semi-structured interview data were transcribed verbatim. The process of analysis was rigorous, systematic, disciplined and careful in methodologically documenting the data. The researcher also used coding to represent each heading. Once the data had been coded, the researcher then categorised the codes, which in turn led to themes. According to McMillan and Schumacher (2006), data analysis is a process of interim analysis, coding, categorising and pattern seeking for credible explanation. The data for this study were kept and managed electronically.

## **1.9 TRUSTWORTHINESS OF THE STUDY**

Thomas et al. (2005) note that credibility was reached when the context, participants and settings were interpreted and presented truthfully. The researcher used a range of different tools to gather the data so that the information obtained could be clarified and reinforced to make certain that the report was a true reflection of what was seen, heard, analysed, and interpreted. Although the study was conducted at only four mainstream primary schools in Soweto, transferability will be apparent when the findings obtained could be identified and transferred to other classrooms and schools' settings.

Dependability was assured by the range of data collected, which made it possible for all the responses to be carefully considered. The use of semi-structured, group interviews, ASKAT questionnaire, together with the intervention strategies of the participants to acquire information improved the degree of confidence in what was read, seen, and heard. The data collection equipment used, for example, the tape recorder and allowed the true voices of every participant involved to be heard.

Thomas, et al. (2005), purported that "One's view of the world varies with one's perceptions and was highly subjective.

Confirmability was evident by acknowledging the researcher's personal bias prior to data capturing. Being involved with ADHD support groups and organisations over a period of over 15 years, the researcher had to consciously ignore his opinions and assumptions when collecting and interpreting information from participants to ensure objectivity at all times. The aspects affecting the ADHD knowledge , as well as intervention strategies when teaching learners with ADHD or those learners perceived to have ADHD, were neither preconceived nor predetermined, and it was imperative not to be influenced by the researcher's experience and feelings to work well with the participants and had to remain open to all that was seen, read and heard so that the data collected were a true reflection of what had happened in classroom setting of learners with ADHD or those learners perceived to have ADHD. Any conclusion could be seen to be relevant.

## **1.10 ETHICAL CONSIDERATIONS**

Ethical considerations were adhered to in the study to ensure that no harm could come to any person as a result of the research study. The anonymity of the participants was the primary ethical consideration in this study. Participation in the study was voluntary and with informed consent of all the participants.

*The following ethical principles will be adhered to:*

Ethical clearance from the College of Education from the University of South Africa (UNISA) was obtained. Permission to conduct the research at the sites was requested from the Gauteng Department of Education (GDE). In addition, each district was requested to allow the researcher permission to enter the research sites, and school principals will be approached for them to grant the researcher a go ahead to interview grade three teachers who will be participating in the study. Once these grade three teachers have agreed to participate, they will be asked to sign consent letters.

The principle of voluntary participation guaranteed the right of the participants to withdraw from the research at any time without penalty. The participants may, for example, refuse to answer any question/s and be interviewed at reasonable times. The principle of informed consent means the participants should at all times be fully informed about the research process and purposes, and first give their consent to participate. This will follow an initial explanation of the research topic, the potential benefits and risks or harm involved if any. This, however, remains a two-way dialogue between the researcher and participants and a continuous process.

The principle of safety requires that participants not be placed at risk or harm of any kind.

The principle of privacy, incorporating the principle of confidentiality and anonymity, pseudonyms (fake names) was upheld. The identity of the participants and the school or sites as well as the information gathered were kept anonymous and confidential.

The principle of trust, especially in conducting interviews and other in-depth data collection methods allowed trust gradually to develop. The researcher must be careful and sensitive in not exploiting this trust for personal gain or benefit, deceiving or betraying the participants in the research route or its published outcome.

## **1.11 TERMS TO BE DEFINED**

The following key terms below will be understood as follows during the research.

### **1.11.1 Attention Deficit Hyper/activity Disorder (ADHD)**

According to the American Psychiatric Association [APA] (2013), ADHD is a neurodevelopmental disorder characterised by behavioural symptoms that cover three variations of this disorder, namely:

- The predominantly inattention type of ADHD (those without hyperactivity);
- The predominantly hyperactivity/impulsive type of ADHD (those without a number of the inattentive symptoms); and
- The combined type, usually the most common type of ADHD, (those with a significant number of symptoms in all three main areas, for an example inattention, hyperactivity and impulsivity).

### **1.11.2 Disorder**

The term disorder, from a clinical perspective refers to the disturbance of the normal state of being (Barkley, 2015). In the case of ADHD, it means that the behaviours of the perceived individuals are contrary or/and unacceptable according to socially set norms and standards of general behaviours. The behaviours of ADHD-diagnosed individuals and/or those individuals perceived to have ADHD may in most instances appear extreme to some and therefore be deemed disorderly.

### **1.11.3 Neurodevelopment**

This refers to individuals' inability to control and regulate activity levels owing to deficiencies in the brain structure of those diagnosed with ADHD or perceived to have ADHD (Rief, 2005). This usually results in inconsistencies in performance, such as being able to conduct a task one day and being unable to perform the same task the following day. This often disrupts outputs and may result in LD and challenges.

### **1.11.4 Impairment**

Impairments are the consequences or outcomes of symptoms or symptoms classes, such as retention in class or grade, failure to complete high school, being involved in vehicle crashes (Willcut, et al. 2012).

### **1.11.5 Symptoms**

The term symptoms refer to a behaviour/s of an individual, for example, switching from one uncompleted task to another, or a set of behaviours that represent a dimension of a mental disorder (Barkley, 2015).

### **1.11.6 Attention**

This is a difficult term that, to an extent, has different meanings to different people, and in different situations. It means that the brain's "receiving" functions — consciously or partly consciously — are directed towards specific phenomena within or outside one's own organism (Gillberg, et al, 2014). It is also affected by a variety of partly correlated factors such as an ability to concentrate, distractibility, ability to automate, short-term memory, "working memory," stamina, degree of activity, processing speed, ability to multi-task, and alertness (Gillberg, et al., 2014).

### **1.11.7 Classroom-based intervention strategies**

Classroom-based intervention strategies are academic and behaviour modification instructional planning tools. These are designed to assist, in this study, township mainstream primary school grade 3 teachers with the supervision and management of learners with ADHD or those perceived to have ADHD-related academic and behavioural challenges and difficulties. The classroom-based intervention strategies alter, adapts, replaces, focuses on the curriculum, sets goals, develops learners' profiles and develops an action plan for learners with ADHD or those perceived to have it in township mainstream primary schools where ADHD is very prevalent.

## **1.12            PROGRAMME OF THE STUDY**

Chapter One: Introduction and background to the study, rationale, purpose of the study, problem statement, research question, research approach, research design, ethical considerations, terms to be defined and program of the research study.

Chapter Two: A theoretical perspective and background of ADHD and relevance to the study.

Chapter Three: Research design and methodology

Chapter Four: Analysis of the data gathered.

Chapter Five: The research study's conclusion, make recommendations, and acknowledge limitations and any outside factor/s that might have influenced the research study in any way. Further research topics will be brought to the readers' attention, which might be studied in much greater depth in the future.

## **1.13            CONCLUSION**

This chapter served as an overview of the research study's background, rationale, the purpose of the study, problem statement, research question/s, research approach, research design, methodology, and programme of the study were discussed. Research ethical considerations were also outlined.

## **CHAPTER TWO: LITERATURE REVIEW ON ATTENTION DEFICIT HYPERACTIVITY/IMPULSIVITY DISORDER**

### **2.1 INTRODUCTION**

Attention-Deficit Hyperactivity Disorder (ADHD), also known as hyperkinetic disorder, is a condition that is characterised by three major subtypes of the disorder namely; predominantly inattentive (ADHD-PI or ADHD-I), predominantly hyperactivity-impulsive (ADHD-HI or ADHD-H), or a combination of both these subtypes (ADHD-C) (Barkley, 2015; Barkley & Peters, 2012; Thomas, Sanders, Doust, Bellier, & Glasziou, 2015).

ADHD has been growing exponentially since the syndrome was first described by a German physician in 1775 (Barkley, 2015; Barkley & Peters, 2012). One of the earliest literature referring to inattentive behaviour of ADHD was recorded by a physician named Alexander Crichton in 1798, he then published a book entitled “An Inquiry into the Nature and Origin of Mental Derangement”, referring to Attention Deficit-Hyperactivity Disorder as a “mental restlessness” (Fitzgerald, Belagrove & Gill, 2007). Most of the early psychiatric literature on ADHD was largely credited to Sir George Still, a paediatrician and the first professor of childhood diseases at King’s College Hospital, London around 1902 (Fitzgerald, Belagrove, & Gill, 2007). ADHD is a persistent neurodevelopmental disorder that affects 5% of children and adolescents and 2.5% of adults worldwide (Hamshere, , O’ Donovan., & Thapar, 2014; Barkley & Peters, 2012; Chang, Z., Lichtenstein, Asherson & Larsson, 2013; Elia, Gai, Xie, Perin, & White, 2010). Throughout an individual’s lifetime, ADHD can increase the risk of other psychiatric disorders, educational and occupational failure, accidents, criminality, social disability, and addictions (Biederman, Mick, & Faraone, 2008). Furthermore, ADHD is a heterogeneous neurobehavioural disorder that displays or manifests in three interpretations. Furthermore, ADHD is a highly heritable disorder. Studies have linked ADHD to environmental factors, including exposure to lead and nicotine prenatally (Nigg, Nikolas, Mark Knottnerus, Cavanagh, & Friderici, 2010).

### **2.2 CAUSES OF ATTENTION DEFICIT-HYPERACTIVITY DISORDER**

Many scholars who write on ADHD (Polanczyk, Willcutt, Salum, Kieling, & Rohde, 2014; Chang, Lichtenstein, Asherson, & Larsson, 2013; Kuntsi, 2014; Coghill, Seth & Matthews 2014), are not certain as to what causes ADHD, but possible causes comprise genetics, environmental factors plus possibly brain injuries, nutrition and social environment (National Institute of Mental Health, [NIMH] 2012). Generally, children with ADHD initially have a thinner brain tissues in the area related to attention. This would then develop to a normal thickness as the child grows older, often resulting in the severity of ADHD lessening (NIMH, 2012).

## **2.2.1 Genes and environment**

### **2.2.1.1 Genetic epidemiology**

ADHD runs in families, with parents and siblings of patients with ADHD depicting between a fivefold and tenfold increased risk of developing the disorder compared with the general population (Franke, 2014). Twin studies show that ADHD has a heritability of 70% to 80% in both children and adults (Larsson, Chang, D' Onofrio & Lichtenstein, 2014; Franke, 2012), with little or no evidence that the effects of environmental risk factors shared by siblings substantially influence aetiology (Burt, 2009).

Environmental risk factors play their greatest part in the non-shared familial environment and/or act through interactions with genes and DNA variants that regulate gene expression such as those in promoters, untranslated regions of genes or loci that encode microRNAs. The disorder is influenced by both stable genetic factors and those that emerge at different developmental stages from childhood through to adulthood (Chang, Lichtenstein, Asherson, & Larsson, 2013). Therefore, genes contribute to the onset, persistence and remission of ADHD, presumably through stable neurobiological deficits and maturational or compensatory process that influence development (Larsson, 2013).

Family and twin studies have also demonstrated that genetic influences are shared between ADHD and a wide range of other neurodevelopmental and psychopathological traits and disorders and problems, cognitive performance, autism spectrum disorder, and mood disorder (Kuntsi, 2014).



### **2.2.1.2 Environmental risk factors**

Identifying environmental causes of ADHD is difficult because environmental associations might arise from other sources, such as from child or parental behaviours that shape the environment, or they might reflect unmeasured three variables (Skoglund, & Larsson, 2014). For example, children with ADHD might evoke 'hostile' styles of parenting, and genes linked to ADHD might explain the association of parenting variables, such as maternal smoking during pregnancy, with offspring who have ADHD (Larsson, 2013).

Other environmental risk factors that have been associated with ADHD include prenatal and perinatal factors, such as maternal smoking and alcohol intake, low birth weight, premature birth and exposure to environmental toxins, such as high level of lead which is found in paints, zinc and organophosphate pesticides (Scassellai, Bonvicini, Faraone, & Gennarelli, 2012). Schelleck and Meyer (2012) suggest that dietary and nutritional deficiencies, biological factors, abnormal lighting, exposure to environmental factors such as toxins and psychological factors should all be considered environmental risk factors.

However, Pfiffer (2011) argue that social environmental factors do not cause ADHD, but that they may influence the severity thereof. O' Regan (2014) concurs and supports this viewpoint by indicating that environmental factors such as poor parenting, stressful situations within the family structures such as, divorce, excessive television viewing, or poor diets and eating habits do not cause ADHD, but that they may influence the contribution towards worsening the child's condition.

## **2.2.2 Brain injuries**

### **2.2.2.1 Cognition**

ADHD is characterised by deficits in multiple, relatively independent, cognitive domains (Sonuga-Barke, & Fairchild, 2012). According to Sonuga-Barke and Fairchild (2012), executive functioning deficits are seen in visuospatial and verbal working memory, inhibitory control, vigilance and planning.

Brain injuries may result in behaviour the same as the symptoms of ADHD. However, only a small percentage of children with ADHD have had or experienced

some form of brain injuries (Walker, 2013). Brain activities indicate that individuals with ADHD are unable to regulate their own reactions to sensory stimulation, often resulting in an over-reaction with detrimental consequences. Brain waves activities are often slower, therefore affecting the ability to predict events or possibilities which may happen as consequence of their actions (Walker, 2013). Sugar is certainly not a proven cause of ADHD. Food additives may possibly result in a link between certain food additives such as artificial colourants or preservatives resulting in an increase in activity. Poor nutrition does place a child at a disadvantage, particularly with reference to the ability to concentrate for extended periods of times, as well as being a cause of possible behaviour problems throughout the day (Kewley, 2011).

No single risk factor is necessary or sufficient to indicate the cause of ADHD. In most cases ADHD arises from several genetic and environmental risk factors that each have a small individual effect and act together to increase susceptibility (Barkley, & Peters, 2012). ADHD is a disorder which has many faces and “look-a-likes,” and it remains a controversial issue in both education and medicine (Faraone, Sergeant, Gillberg & Biederman, 2003) because of its high prevalence estimated reviews within the two fields across three decades (Planczyk, Willcutt, Salum, Kieling, & Rhonde, 2014).

In terms of its high prevalence, ADHD occurs in 5% to 12% of children worldwide which translates roughly to one or two learners per classroom, depending on the classroom learners' enrolment (Michielsen, 2012). Its diagnosis and treatment by healthcare systems is recognised as a valid mental disorder by professionals within the medical community. These individuals diagnose and prescribe medical treatment, for example, medication, but school teachers may not be involved in the assessment process for ADHD nor be informed about its treatment. The education system lacks recognition of this disorder as a special needs category, and ADHD is neither a major focus within teacher-training programmes, nor is there a system approach to identification and intervention for ADHD within the educational system.

This means that each year, virtually every school teacher must try to accommodate and teach one or two ADHD learners in the classroom or are perceived to have it without any comprehensive training in the nature or educational implications of the

disorder. It also has a high risk for poor academic outcome and high school dropout. Robust evidence from longitudinal studies of children and adolescents in Canada and the U.S.A. indicated that ADHD impedes academic achievement. According to this evidence, “ADHD increases the probability of delinquency and grade retention, reduces future reading and mathematics/numeracy scores, and increases the probability of specialised education”.

Moreover, the results suggest that even children whose hyperactivity symptoms would not normally lead to a diagnosis of ADHD were at risk for poorer outcomes,” and that there is limited information about the impact of ADHD in the classroom setting. At school level, teachers have unparalleled opportunities to raise concerns about their learners with ADHD; their valuable descriptions of the day-to-day functioning of these learners in the classroom; and their plea for information about ADHD and for suggestions as to how teachers might be assisted (U.S. Department of education, Office of Special Education and Rehabilitative Services, Office of Special Education Program, 2003).

Learners with specific learning disabilities (SLD) and/or language impairments may also show some behavioural symptoms of ADHD including excessive tiredness, chronic hunger, medication for other health problems, for example, asthma, brain injury following an accident. Therefore, teachers should consult the parents to understand the identified learners’ life history, and ultimately consult an educational psychologist or a physician about a diagnosis of ADHD in order to rule out other medical explanations of the ADHD symptoms.

In schools the term and more so a label “Hyperactivity” is loosely used to stereotype and describe learners how to exhibit any symptom of ADHD because these learners experience significant problems, challenges and difficulties with inattention, impulsivity, hyperactivity guarding its prevalence, development effects and appearance. Therefore, ADHD and its effects have far reaching consequences in the daily functioning and behavioural adjustment of specific individuals. Nevertheless, the diagnosis of ADHD should be made first for learners to be treated for ADHD.

Another aspect that must be considered is that of a universal cross-cultural prevalence. Estimations are that between 3% to 6% of children from various cultures, races and geographical locations or backgrounds had at some point, been diagnosed with ADHD and/or other associated disorders. More current studies have depicted the figures to be considerably high (Rief, 2005). Although the effects of ADHD have been recognised worldwide, various methods of detection and differences in diagnostic definition resulted in variations in its recognition and reporting rates. The American Psychiatric Association or APA (2013) has suggested that some more cases, of all school-going children have been diagnosed with ADHD, with an over representation of more boys than girls, approximately 3:1. Boys tend to be hyperactive more often than girls, with the latter having a less boisterous tendencies (Gurian, 2001).

ADHD does indeed remain a debilitating disorder that impairs the normal functioning of individuals in every aspect of life. Researchers worldwide recognised that not only is ADHD a general transmitted disorder, but also one that was affected and aggravated by psychological and social experiences, neurology and nutritional factors, as well as by environmental variables (Sonna, 2005).

### **2.3 DEFINITIONS OF ADHD**

ADHD is a chronic condition that affects millions of children worldwide, and often continues into adulthood (Barkley, 2015). This condition includes a combination of persistent problems such as difficulty sustaining attention, hyperactivity and impulsivity behaviours (APA, 2013). Children with ADHD also may struggle with low self-esteem, troubled relationships and poor performance in school (Kuntsi, 2014).

ADHD is a neurodevelopmental disorder that is characterised by behavioural symptoms of inattention, hyperactivity-impulsivity or a combination of both (APA, 2013). This condition is a relatively high-incident neurodevelopmental disorder that affects approximately 5% to 7% of children worldwide (Willcut, 2012). According to Harpin (2005), ADHD is a neurobiological disorder that interferes with an individual's capacity to regulate activity levels (hyperactivity); inhibit behaviours (impulsivity) and to attend to tasks at hand (inattention), in developmentally appropriate ways. Moreover, ADHD is characterised by “ a chronic and persistent pattern of

developmentally inappropriate levels of inattentiveness, hyperactivity and impulsivity manifesting in early childhood” (American Psychiatric Association, 2013). Individuals with ADHD often exhibit deficits in one or more areas of executive functioning, including verbal working memory, emotion regulation, behavioural inhibitions, motivation, planning, strategy generation and implementation, and self-monitoring (Polanczyk, de Lima, Horta, Biederman, & Rhonde, 2007).

A more suitable definition perhaps, for the purpose of the present study would be one that highlights the learners’ differences as strengths more than deficiencies, by pointing out that ADHD is the results of a highly sensitised nervous awareness that promotes creativity and emotional expression, and may as well be accompanied by increased motor movement, hearing ability, tactile sensitivity, above the normal peripheral vision and an extremely sensitive emotional balance. This was supported by Honos-Webb (2005) who stated that, seen from such a perspective, ADHD might appear to be most manageable than it would be when seen from a disorder perspective.

## **2.4 PREVALENCE OF ADHD IN CHILDREN**

Barkley (2015) asserts that the prevalence of ADHD in children is on average 5% to 7% while in adults is around 3% to 5%. ADHD’s prevalence is universal. A problem in determining the prevalence of ADHD is that of determining when it is considered normal or a deviant behaviour. A vital criterion to be considered regarding the prevalence of ADHD is how cases are identified by teachers, parents and guardians or professionals. ADHD is a very common and well recognised behavioural disorder that affects millions of children, adolescents and adults worldwide. It has been found to affect between 5% to 12% of the school-age population worldwide (Faraone, 2015; Faraone, Sergeant, Gillbert, & Biederman, 2003; Polanczyk, Rohde, & de Lima, 2005).

This disorder is about three times more common in boys than in girls. For teachers, this prevalence translates into potentially one to two learners in every classroom setting, particularly in countries such as Canada, the United States, Japan, China, India, and Australia, as well as in Europe, South Africa, and South American countries. The disorder also affects about one in 25 adults, making it one of the most

common mental health problems in adulthood as well as in childhood (Kessler, Chiu, & Demler, 2005). From a school perspective, this means that it was likely that several professionals in any school setting system experienced the burden of ADHD themselves.

However, it was important to understand that although specialists referred to ADHD as a disorder, suggesting that a person may either have ADHD or may not have ADHD, the symptoms occurred on a continuum of risk like for an example, high blood pressure (APA,2013). This means that there may be several learners in a classroom setting who exhibited problematic behavioural symptoms, for an example, moderate inattention, but did not meet the diagnostic criteria for ADHD (APA, 2013; Barkley, 2015). Nonetheless, those learners may also experience adverse outcomes. In particular, children who exhibited moderate to severe levels of inattention, yet who may not receive a diagnosis of ADHD, were at risk for poor reading achievement, poor grades and grade retention (Harpin, 2005; Curry, & Stabile, 2004; Wargner-Rogers, Taylor, Taylor, & Sandberg, 2000).

## **2.5 CLARIFICATION OF ADHD CONCEPTS**

The following is a brief attempt at clarifying some of the meanings that relate to ADHD and those that constitute the context and title of the study.

**Inattention:** This refers to the individual's inability to maintain the levels of focus necessary to internalise information (Gillburg, 2014; Rief, 2005), and/or listen to instructions. This often resulted in the loss of important basic learning information, which later may translate into various LD.

**Hyperactivity:** This is an individual's inability to control movement, as driven by a motor (for example, constant movement in a chair, getting up and down from a chair, running or climbing around when others are seated), also may manifest as talking so much that others cannot get a turn (Gillburg, 2014).

**Impulsivity:** Acting quickly without thinking first, higher than normal levels of impatience, that may lead to accidents and thoughtless behaviours of an individual (DuPaul & Stoner, 2014). Lack of impulse control results in an ability to wait for

his/her turn, blurting out answers before checking if they were correct or not, and breaking rules because of lack of forethought and patience. That type of an individual tended to commence a task without waiting to get and understand given instructions at first, which often resulted in careless mistakes (APA,2013).

**Disorder:** This refers to the disturbances of the accepted normal state of being (Barkley, 2015). In an ADHD instant, disorder means that the behaviour/s of the diagnosed individual was contrary and/or unacceptable according to social set standards of general behaviour/s. The behaviour/s of ADHD-diagnosed individual/s may appear extreme to some and therefore be deemed disorderly.

**Neurobiological disorder:** This is a disorder that interferes with an individual's capacity to regulate activity levels (hyperactivity), inhibit behaviour (impulsivity) and attend to tasks at hand (inattention). That may usually result in inconsistencies in the performance of an individual, such as being able to carry out given tasks one day after the other and being unable to perform the same task the following day (Barkley, 2015; Rief, 2005). This disrupted output and resulted in LD.

**Distractibility:** Also known as hyper-responsive is the inability to block out extraneous stimuli such as sounds, sights and environmental movement (Barkley, 2015). This is true of movement that happens just inside the individual's line of peripheral vision. When sound is involved, even the subtlest sounds will affect the distractible individual.

**Neurobehavioural:** This refers to the behaviour that is characterised by a number of differences in the brain structure and functions that affected the individual's emotional balances, thought processes and general behaviour (Riding & Rayner, 2005). That would often result in moodiness, depression and anger, as those individuals appeared to be unable to determine emotional boundaries.

**Neurotransmitters:** These are chemicals that make it possible for the nerve impulses to travel from one nerve cell to another, and therefore played an essential role in the functioning of the brain (APA, 2013). The brain performs a vast range or number of tasks and/or functions, allowing us to, for example, to see, hear, think,

speak, and move. Each function is performed by a different part of the brain (Barkley, 2015).

## **2.6 ADHD DIAGNOSIS AND SYMPTOMS**

### **2.6.1 Diagnosis and symptoms**

The diagnosis process for ADHD assesses the inattentive and hyperactivity-impulsivity symptoms criteria for ADHD, evidence that symptoms cause functional impairments and age onset before 12 years (APA, 2013). Although ADHD is associated with other features such as executive dysfunction and emotional dysregulation (Surman, 2011; Biederman, Petty, O'Conner, Hyder, & Faraone, 2012), these are commonly observed in other disorders and are not core diagnostic criteria for ADHD.

The American Psychiatric Association's Diagnostic and Statistical Manual, 5<sup>th</sup> Edition, 2013 (DSM-5) is used by mental health professionals to assist in the diagnosis of ADHD. This diagnostic standard helps ensure that people are appropriately diagnosed and treated for ADHD. Using the same standard across communities will help determine as to how many children have ADHD, and how public health, school and homes are impacted by this condition (APA, 2013).

The diagnosis of ADHD is often influenced by gender and also a non-adherence to the typical diagnostic criteria. This often results in an over diagnosis, in particular amongst males (boys), since they do not conform to the expected behaviour, and females (girls) generally conform to acceptable norms and behaviours. Hence, females (girls) are not easily identified as having ADHD (Schelleck, & Meyer, 2012). Kern, Amod, Seabi and Voster (2015) collectively suggest that the diagnosis of ADHD in school-going children is done from the age of three to ten. This then results in an escalated referral of learners to school psychologists, specialists in psychiatry and paediatricians. Class teachers are at that stage in an ideal position to identify and refer their concerns regarding the specific learner's behaviour to their districts and to parents/guardians, who in turn will refer the identified learner to professionals for further diagnosis (Kern, et al. 2015).



ADHD is normally diagnosed by a psychologist or a medical practitioner (Schellack & Meyer, 2012). The diagnostic criteria in the Diagnostic and Statistical Manual for Mental Disorder, fifth edition [DSM-5] (2013), characterises ADHD as:

A persistent pattern of inattention and/or hyper-activity-impulsivity that interferes with the functioning or development as characterised by at least six symptoms from either (or both) the inattention group of criteria and the hyperactivity and impulsivity criteria. These symptoms have persisted for at least six months to a degree that is inconsistent with the developmental level and that negatively impacts directly on social, educational and work settings (Sadock, Sadock & Ruiz, 2015).

There is no single test to diagnose ADHD, and many other problems, like anxiety, depression, and certain types of LD, can have similar symptoms (APA, 2013). According to DSM-5 for diagnosis of ADHD, symptoms can now occur by the age of 12 years and several symptoms now needed to be present in more than one setting rather than just some impairment in more than one setting; new descriptions have been added to show what symptoms might look like at older ages; and for adult and adolescents age 17 years or older.

Given the chronic and impairing nature of ADHD, it is very important for intervention efforts to be comprehensive and initiated over a long period of time, such as early identification of the learner/s' learning needs, strengths, and behavioural targets, for example, literacy skills, and support necessary to enhance engagement and learning (Ashtari, Kumar, & Bhaskar, 2005).

## **2.7 ADHD IN SCHOOLS**

ADHD is a syndrome that comprises of extreme forms of inattention, hyperactivity, and impulsivity presentations (APA, 2013). In certain instances, this happens in a combination of hyperactivity and impulsivity presentations, whereas in others it may depict inattention presentation on its own (APA, 2013). However, there are other instances wherein all the three presentations aspects manifest all at the same time. In such cases that can cause behavioural, academic and social impairment throughout the life of the individual learner (Barkley,2015). To compound this further the issue of proper diagnoses of ADHD is critical. It may also co-morbid with other disorders, such as Conduct Disorder (CD), LD, Oppositional Defiance Disorder (ODD), Tourette Disorder, Aspergers Disorder, Anxiety Disorder, development of coordination disorder, difficulty in sleeping, Specific Learning Difficulties (SLD), Bipolar Disorder (BD), Tics, Speech and Language challenges (Reid, & Johnson, 2012; Elia, Gai, Xie, et al., 2010).

### **2.7.1 Attention Deficit Hyperactivity/impulsivity Disorder behaviours in schools**

According to Ormrod (2014), there is an increase in ADHD behaviours in school settings since it is one of the most misunderstood, misinterpreted and misdiagnosed syndromes. However, it is interesting to note that Goldstein's (2002) findings revealed that one out of every ten teachers did not believe that ADHD was a real medical condition and that there was nothing that could be done to assist those learners with ADHD during teaching times. One then must ask the question in relation to township schools foundation phase teachers and specifically those teaching grade 3s.

It is no surprise then that in any given school setting, one is met with teachers who believe that any slight deviation in behaviour by learners is an indication of ADHD, while others agree that the disorder does not exist (Kern, Amod, Seabi & Voster, 2015). Furthermore, there is also controversy surrounding the accepted methods of treating learners with ADHD or those perceived to have it. Does one medicate, use behaviour modification techniques or adapt the environment to better suit the identified individual learner/s (Pffifer, 2011)? Based on the conflicting perceptive evidence given earlier, as well as intensive research in this area since the dawn of

democracy in South Africa, this study intended to explore Grade 3 teachers' experience and understanding surrounding ADHD and the intervention strategies they apply (if any) when teaching Grade 3 learners with ADHD or perceived to have it, at that developmental stages of such learners in school and classroom settings.

### **2.7.2 Labelling of learners showing ADHD signs and symptoms**

The labelling of learner/s depicting signs and symptoms of ADHD in school and classroom settings is a regular practice particularly by school officials (Kewley, 2011). School teachers, parents/guardians and other education officials should be aware of this disorder and play a significant part in identifying such learners. Collectively teachers, parents/guardians and other education officials should come up with individualised educational programmes for these learners, especially at that developmental foundation phase level (Kern, et. al, 2015). This implies that teachers' experience and understanding at that grade level is of critical importance. The teachers' experience and understanding of ADHD would make and create a conducive and positive classroom relationship between the foundation phase teachers and the identified learner/s with ADHD or those they perceive to have it (Kern, et al., 2015).

Kewley (2011), suggests that once teachers have an understanding of this disorder, they will then be able to structure their teaching plans accordingly, which in turn will consider the identified learners' weaknesses and strengths. Teachers could then academically implement these to meet the learners' educational expectations in classroom settings. According to Kewley (2011), these are clues and tips the grade teachers could apply in assisting the learners with ADHD or those perceived to have it to stay focussed during activities in classroom setting, thereby creating and maintaining a balanced learner who in turn will experience success in ones learning.

## **2.8 ADHD IN CLASSROOM SETTINGS**

Teachers in classroom settings are the first to notice and realise that there is a challenge and or problem with a specific learner in a classroom setting (Pffifer, 2011). The parents and guardians will be aware but not report the issue at school. That experience by the parents will only be brought about to the attention of the teacher when the grade teacher requests the parents or guardians to come and

complete the education department 440 intervention forms. These are department of education forms used by grade teachers after identifying the learner/s so that the identified learner/s must be referred for further assessment by a trained professional within the education department. It is expected of the grade teacher/s to provide written evidence whenever they submit these forms. The teacher must record the classroom and school grounds behaviours of the identified learner/s for the sole purpose of making a holistic, non-biased and eco-systematic comparison.

Also included in the evidence by the grade teacher/s could be a social worker's report, only if the school has one, with the sole purpose of determining as to whether there could be mitigating home and community circumstances. First the trained district educational psychologist must collect all the required relevant and authentic information from the school to determine the actual reasons for the learner/s' behaviour. Then the school, home and community environments must then be investigated. If need be, a physician may be consulted to alleviate and eliminate any possible co-morbid behaviour.

After that, information with reference to the on-going behaviour of the identified learner/s must then be put together to make comparison with the symptoms and diagnostic criteria of the Diagnostic and Statistical Manual of Mental Disorders 5th Edition, DSM 5, (2013). The third process would be for the teacher/s and all relevant trained professional at school be contacted for feedback. The teachers' experience and understanding relative to the learner/s with ADHD and their ability to make comparison of the learner/s chronological age with peers is of fundamental significance and extreme value. An interview with the grade teacher, the parents and or guardians and other personnel in contact with the learner/s' educational welfare of the learner/s should be conducted. Finally, the learner/s' profile must be drawn up in consideration of the entire existing circumstances, upon these issues, then a fair diagnosis must be undertaken (Kewley, 2011).

## **2.9 ADHD IN FOUNDATION PHASE**

Teachers of foundation phase school children, identify classroom behaviour/s problems, including those caused by ADHD, as important detriments to the daily functioning of the class and to learner/s progress (Kern, et al., 2015). Teachers at

foundation phase seems to have a limited understanding of ADHD in terms of what it is as well as its causes, and it also appeared that the teachers' understanding of ADHD was limited to the behaviours that are displayed by the learner/s and did not take other factors into account (Kern et, al. 2015).

Although many doctors are reluctant to give a diagnosis of ADHD at this very young and developmental age, there was growing evidence that early behavioural problems did not dissipate and that marked inattentiveness in foundation phase school predicted later academic underachievement (Rabiner, & Cole, 2000; Spira, & Fischer, 2005). Indications of inattention in foundation phase school learners with ADHD are associated with poor reading readiness skills. This in turn had a strong negative effect on reading abilities in the later grades. Inattention in the first and second grades was predictive of reading underachievement, even when other factors were considered, such as preschool reading achievement, IQ and parental involvement (Rabiner, & Cole 2000; Spira, & Fischer, 2005).

Foundation phase school learners with ADHD stand out markedly from their non-ADHD peers on a variety of behaviours and abilities (Spira, & Fischer, 2005; Kalf, De Sonnevile, & Hurks, 2005). For example, they are unable to sit through games, stories and circle time; may roll around on the floor or crawl under the table. Constantly asked questions but racing off before the answer was given, constantly running and on the go and stopped only when they collapse from exhaustion. They are seemingly unaware of their grade school routines, rules and expectations, even after several months and years in school, and they fail to meet academic and social expectations of foundation phase school settings. They depict cognitive weaknesses in working memory, inhibitory control, speed of processing information, problem in understanding the "instructional language of the classroom" and producing organised and focused spoken responses to the teacher's questions, they bang into objects and people, climbed and jumped off furniture, and experience frequent injuries that may require hospitalisation, such as head injuries, or fractures.

Although ADHD in school-going children vary in severity and types of problems shown in classroom settings, they typically stand out from their classmates in many ways than one (Weiss & Jain, 2000). For an example, in addition to depicting behavioural symptoms of ADHD, learners with ADHD generally acted much younger

than their age, despite having average intellectual ability. These learners with ADHD often acted as the “class clowns” in the classroom and by so doing gain the attention of other learners and disrupted their work. This is much more common among boys with ADHD (Weiss, Jain, 2000). These learners with ADHD talked excessively but may become silent or monosyllabic when called upon by the teacher to respond. They often do not have any close friends or have difficulty reciprocating and sustaining friendship (Brook, & Boaz, 2005; Hoza, Mrug, & Gerdes, 2005; Blachman, & Hinshaw, 2002).

Typically, but not always, learners with ADHD or those perceived to have it, have problems with their school work and homework despite good intellectual abilities. For an example, they are not able to work independently, they are unable to start or to complete in-class work or homework (Evans, Owen, & Bunford, 2013). These learners often showed great difficulty in or even avoided written work; so, they write very little or nothing down on paper (Mayes, Calhoun, & Crowell, 2000). They often obtained lower academic achievement scores and were at high risk for failing the grade level, despite their average intellectual abilities (Curry, & Stabile, 2004; Harpin, 2005).

Learners with ADHD are at increased risk for accidental injuries at school and home, particularly injuries such as bone fractures owing to falls, bicycle accidents, and pedestrians accidents (Rowe, Maughan, & Goodman, 2004; Brehaut, Miller, Raina, & McGrail, 2003). Academic failure was more closely associated with the Inattentive and Combined subtypes of ADHD, whereas the Hyperactivity/Impulsivity subtype was most often associated with co-occurring oppositional behaviour/s and conduct problems, but not academic problems (Rabiner, & Cole, 2000; Carroll, Maughan, Goodman & Meltzer, 2005; Todd, Sitdhiraksa, & Reich, 2002). Therefore, according to the researchers, it appears that the dimension of inattention (common to both inattentive and combined subtypes) was what predicted poor academic outcomes.

## **2.10 TEACHERS’ ATTENTION FOR LEARNERS WITH ADHD**

Differential teachers’ attention has also been found effective for learners with ADHD (Vanest, Davis, & Davis, 2010). Teachers should catch their learners with ADHD being good and provide positive attention for the social desirable behaviours of the

social desirable behaviour. Praise should occur immediately following the desired classroom behaviour and should be specific in nature. For example, “James, you are doing a great job of completing your worksheet!”. Additionally, teachers can extinguish minor disruptions behaviours of learners with ADHD, for example, tapping of a pencil through ignoring (Vannest, Davis, & Davis, 2010).

It should be noted, however, that ignoring minor behaviours may sometimes lead to more intrusive behaviours, for example, calling out because learners with ADHD are not gaining the attention that they desire and have not been provided a socially acceptable replacement (Volpe, & Fabiano, 2013). Conversely, evidence also suggested that teachers’ reprimands can be effective in reducing interfering behaviours, and redirections should be brief and specific, and should be consistently delivered immediately following the negative behaviour in a calm and quiet manner (Volpe, & Fabiano, 2013).

## **2.11 PARADIGMATIC PERSPECTIVE**

### **2.11.1 Meta-theoretical assumptions**

While a learner is developing at foundation phase school settings, home and within the community, the learner will in most probable cases be learning how to behave through interaction with its teachers, parents/guardians, siblings and peers. The development of the learner’s behaviour is usually not a haphazard activity but a purposeful activity that integrates the learner into its educational and social community settings.

Behaviour has a structure. The learning of behaviour therefore has a pattern for learners, particularly those learners with ADHD or those perceived to have it, and through it they obtain a structure – a basic order of behaving and thinking from their foundation phase grade teachers. The Sapir and Whorf (1934) hypothesis posits the idea that as a person lives, so does the learner behave and think. The behaviour used by a learner governs the way the learner thinks. According to their views, there is a clear association between the educational environment of the learner and the way the learner develops his behavioural thinking.

### **2.11.2 Theoretical assumptions**

The behaviourist, for example Pavlov and Skinner, who dominated the behaviour and language acquisition and learning scenes in the early parts of the 20th century, they saw behaviour and language merely as a learned feature of human existence. The theories of psychologists such as Piaget, Vygotsky, Bruner, and Chomsky were on the development of behaviour and the thinking abilities of the child. Vygotsky's theory is applicable in this study as well. Vygotsky (1962) posits that children learn to think while acquiring behaviour and language. He saw children not as rigid in their mental development as Piaget suggested, but spoke of a variety of stages in the cognitive growth of the child. The child in life situations is usually a person in need of assistance. Children can do certain things or activities up to a point and need to be assisted in order to progress further. Vygotsky calls that process of assistance the Zone of Proximal Development (ZPD).

Relative to the ZPD, paradigms are a way of looking at the world. They are composed of certain philosophical assumptions that guide and direct thinking and action. Guba and Lincoln (2005) noted that many changes had occurred in the status of paradigms and choice of methods over the years, such that various paradigms were beginning to "interbreed." In other words, inter breeding in the context of the study means using various paradigms collaboratively towards a common research understanding and/or goal/s.

The nature of this study was such that it required that the researcher become involved in the day-to-day teaching lives, experiences and understanding of ADHD of the participants. Therefore, the constructivist approach has been chosen as a paradigm appropriate for this study because it found substance and significance in social action, to which people attach meaning (Neuman, 2005). This will be explained further in Chapter 3. Using a constructivist approach necessitated the researcher adapting classroom-based intervention strategies based on the experience of the participating grade 3 teachers.

### **2.12 CONCLUSION**

ADHD has tremendous and challenging impact on learners with it or perceived to have it, on the teachers and on all other aspects of the learners' life, be it at school



or at home. The ramifications of ADHD's aetiology made it a multidimensional disorder that was challenging to be treated and understood. Its many facets, which are represented in the diversity of the individual who had been diagnosed or perceived to have ADHD, were as diverse as the individuals themselves.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 INTRODUCTION**

This study adopted a qualitative research approach to explore grade 3 teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools.

### **3.2 PARADIGM**

Paradigms are practices and philosophies that regulate investigation within a discipline by providing structures and procedures through which an exploration is accomplished (Maxwell, 2013). In that regard, researchers should have an awareness and understanding of the beliefs and philosophical assumptions they bring to any study that they engage in and philosophical ideas influence research practices through paradigms (Creswell, 2013; Lincoln & Guba, 2013). The concept of paradigm was drawn from Kuhn for whom it meant a collection of beliefs, values, techniques shared by community members given (Maxwell, 2013). However, for social science researchers, a paradigm is "a basic set of beliefs that influences actions" and a researcher's view of the world based on common expectations, ideas, principles, and practices (Maxwell, 2013; Lincoln & Guba, 2013). Therefore, constructivism, as a philosophical foundation for this study, was selected and adopted as the research paradigm on which this study is anchored.

#### **3.2.1 Constructivism**

A constructivist paradigm upholds the idea that there are multiple and credible realities to human beings' experiences that are uncovered through intense reflections (Denzin, Lincoln & Guba, 2011; Creswell, 2013; Lincoln & Guba, 2013). Such reflections are nurtured through the researcher and participants interaction and dialogue. Therefore, it was imperative that the researcher and the participants co-construct findings and interpretations from their dialogue (Silverman, 2010; Creswell, 2013; Lincoln & Guba, 2013). This school of thought has the goal of understanding the multifaceted world of lived experiences from the point of view of

those who live it. The world of lived reality, situation and specific meaning that create the general body of investigation is fabricated by social performers (Silverman, 2010; Creswell, 2013).

A fundamental belief for qualitative research is that the world is complex and that there are multiple explanations for human behaviours that result from the interaction of multiple factors (McMillan & Schumacher, 2010). It follows then that the methods that investigate behaviours and explanations need to be sufficiently complex to capture the true meanings of what had occurred. This leads researchers to examine multiple perspectives, while simultaneously, qualitative researchers realise that it is not possible to account for all the complexities present in a situation (McMillan & Schumacher, 2010).

The researcher's intention was based on grade three teachers experiences of learners perceived to have ADHD and wanted to establish the types of interventions (if any) employed when teaching such learners in Soweto mainstream primary schools. The researcher assumed that there would be multiple realities, where in one grade 3 teacher's experiences would differ from other grade 3 teachers. By engaging participating grade 3 teachers in face-to-face interviews, FGDs, observing them and using a questionnaire, the researcher assumed that a new understanding of grade 3 teachers experiences of learners perceived to have ADHD and the types of interventions (if any) employed, would be co-constructed within the historical and cultural context of Soweto mainstream primary schools.

### **3.3 RESEARCH PROBLEM**

Since the dawn of democracy in South Africa, the Department of Basic Education (DBE) has been undergoing education reforms and it is therefore, expected that teachers include all learners with various educational needs in their classroom and school settings, regardless of the learners' learning challenges and disabilities as according to the White Paper 6 on Inclusion (DoE, 2001), inclusive of learners perceived to have ADHD in the case of this study.

In that regard, learners perceived to have ADHD will often find the expectations associated with social, classroom and school activities very challenging and difficult

to cope with. This might become difficult and challenging for grade 3 teachers to cope with, resulting in disharmony and chaos caused, when learners perceived to have ADHD are treated somewhat different to others regarded as “normal” learners and joy to teach. Therefore, to further the research topic meaningfully, it was necessary to address the following questions:

### **3.3.1 Research question**

What are grade 3 teachers’ experiences of learners perceived to have ADHD in Soweto mainstream primary schools?

#### **Sub-questions are as follows:**

- What classroom experiences do grade 3 teachers have on ADHD?
- What criterion do grade 3 teachers use in identifying learners perceived to have ADHD?
- What interventions (if any) do grade 3 teachers employ in helping learners perceived to have ADHD?
- What external support do grade 3 teachers get to be able to deal with learners perceived to have ADHD?

### **3.4 PURPOSE AND AIM OF THE RESEARCH**

The purpose of the study was to explore grade 3 teachers’ experiences of learners perceived to have ADHD in Soweto mainstream primary schools with the aim of harvesting intervention strategies (if any) employed in teaching learners perceived to have ADHD.

### **3.5 RESEARCH DESIGN**

Babbie (2011) and Creswell (2013) concur that a research design is a plan for conducting the study. In the same vein, Kumar (2012) defines a research design as a procedural plan that is adopted by the researcher to respond to questions, validity, objectively, correctly and economically. According to McMillan and Schumacher (2010), a research design is a procedure for conducting the study, inclusive of when,

how, from whom and under what conditions the data will be collected. A research design is a plan for accomplishing research goals and for resolving research problems by answering the research questions. The design is the main guide that indicates the techniques and processes for the collection and exploration of data (Mihirka, 2014).

It is the researcher's plan of putting standards of interpretation into motion and indicate how to proceed in gaining an understanding of a phenomenon in its natural setting (Ntakana, 2013). Additionally, it demonstrates whether the information was gathered in a way that was suitable for the questions asked, that is, it measures the appropriateness of the method used (Mihirka, 2014). It involves paying attention to the relationship between inherited ideas, perceptions, assumptions and all the techniques as well as practices during the process of the inquiry. The purpose of this strategy is to assist in clarifying exactly who and what will be studied as well as when and how it will be studied. It also helped the researcher to think about how data (evidence) collected were analysed (McMillan & Schumacher, 2010).

According to Gray, Williamson, Karp, and Dalphin, (2011), a research design attempts to provide the most valid and feasible answers to the research questions. Comprehensively defined, a research design is a plan for collecting and analysing appropriate evidence that makes it possible for the researcher to answer the research questions (Flick, 2014). This study was conducted with the interest to explore grade 3 teachers' views, opinions and responses regarding their experiences of teaching learners perceived to have ADHD, as well as interventions they employed (if any) during their lessons.

### **3.5.1 Case studies**

A case study is a descriptive account of academic and behavioural outcomes, history and other relevant factors that clearly did not stand out from its context. According to Yin (2003), it could assist the researcher to re-look at the research topic broadly; as such a technique that afforded the researcher an opportunity to refocus the research topic from the perspective of all participants. A case study also afforded the researcher an opportunity to study within the topic's appropriate context, gathered from multiple sources of relevant evidence.

According to Cohen, Manion and Morrison (2002), a case study is a specific instance that is frequently designed to illustrate a more general principle, which meant that it was a study in action. In this study, the focus was grade 3 teachers from four township mainstream primary schools in Soweto.

### **3.5.2 Site**

A site in the context of this study refers to the four mainstream primary schools selected from four various districts serving Soweto mainstream primary schools. The four districts from which the schools were selected are Johannesburg North (D10), Johannesburg South (D11), Johannesburg West (D12) and Johannesburg Central (D14). All the four districts operate under the auspices of GDE. The four schools were selected as they are mainstream primary schools serving the huge population of Soweto grade 3 learners.

## **3.6 DATA COLLECTION**

As a qualitative study, there are a variety of data methods available, such as interviews, FGD and observations (Magwa & Magwa, 2015). Data collection consists of the application of a research approach to the sample for exploration to make new data about the research topic available for further processing. For this study, semi-structured interviews, FGDs, and the use of an ASKAT questionnaire were employed to extract and explore data from participating grade 3 teachers. Observation was to be undertaken as an important research tool that enriches data collected. However, during the commencement of the study, access to the classroom was denied as teachers expressed that they felt they were going to be critiqued.

### **3.6.1 Sample**

Purposeful or purposive sampling was deemed appropriate for this study because it identifies participants based on some characteristics which the researcher chooses to enable oneself to explore the central themes in detail and questions pertinent to the study and members of a sample are selected to represent a type in relation to key criterion (Bryman, 2012; Ritchie, Lewis, Nichollson & Ormond, 2014). This is meant to ensure that key constituencies of relevance to the study questions are covered and to also ensure that, within every key criterion, enough variety is included so that the influence of the characteristics concerned can be explored (Ritchie, Lewis, Nicholson, & Ormond, 2014).

The sampling of grade 3 participating teachers was selected from four participating mainstream primary schools in Soweto. The relevant process of accessing the participants was followed by requesting the GDE, their respective four districts and school principals' permission to conduct the research and enter the research sites. The sampling procedure was followed by writing request letters to all parties namely, GDE, the four districts and school principals including the prospective participants, to allow the researcher an opportunity to enter the research sites for the sole purpose of interviewing and observing the participants. Once participants agreed to be part of the research process, they were then requested to sign consent forms or letter. This was done after an intensive explanation of ethical measures were explained to the prospective participants.

Participating grade 3 teachers who were selected to take part in this study, had to have personal experiences of learners perceived to have ADHD in their classrooms. This was the central phenomenon of this study (McMillan & Schumacher, 2010; Creswell, 2013; Miles & Huberman, 2014). The researcher believed that participants would be information-rich cases from whom most could be learned. This perceptive decision is supported by other scholars depicting that in purposive sampling, participants who are informed and or knowledgeable of a certain phenomenon are usually selected (McMillan & Schumacher, 2010; Braun & Clarke, 2013; Chireshe, 2013).

Those grade 3 teachers needed to live if possible within the community where those schools were situated; they should be at least between the ages of 23 years and 65 years old, 22 years is probably the entry level after passing Grade 12 and a 3 years teachers' diploma and 65 years is the retirement level. Those teachers must be permanently employed by the GDE. They should be in possession of a three-year teachers' diploma and any post qualification/s in education that is recognised by GDE. They should have been teaching grade 3 or within the foundation phase for more than two years. They must be registered with South African Council of Educators (SACE) which is a body that monitors and regulates teachers' conduct .

The target population for this study was purposefully selected and consisted of teachers in the foundation phase and specifically 24 (24) grade 3 teachers, that is, six grade three teachers multiplied by four participating schools equals to 24. About 24 prospective participants were envisaged with the FGDs expectations in the researcher's mind from Soweto mainstream primary schools taking part in this study.

Participants in this study all had to have one aspect in common and that is, they all must have learners in their classroom settings with varying degrees of behaviour difficulties, causing classroom disharmony and some level of hyperactivity. The participants' privacy and anonymity were upheld throughout the research study period, in accordance with the study's ethical requirements. Grades 1 to 3 provide the learners with scholastic foundation that was needed for the learners' future in education, as those grades offered a wide range of areas where in which problems related to ADHD could arise and that such ADHD-related problems may seriously hinder learning (Levine, 2002). Participants were most probably all from Soweto's community backgrounds, various beliefs and diverse educational needs.



### **3.6.2 Semi-structured interview**

There are three types of research interviews, namely, structured, semi-structured and unstructured (Magwa & Magwa, 2015). According to Tabane (2016: 178), “care must be taken to ensure that the selection of the type of interview does not exclude participants – not only regarding content, but also, for example, regarding other aspects such as language and the level at which the questions are pitched”. In this study, semi-structured interviews were used because open-ended-questions were the most appropriate and effective way to collect data from the participants. Furthermore, participants were teachers and able to express themselves adequately in responding to the research question. Therefore, the selection of the semi-structured technique offered the interviewer and the interviewee an opportunity to delve their thinking to enrich their understanding (Padilla-Diaz, 2015). Semi-structured interviews were schedule to collect data from the selected grade 3 participating teachers (see appendix K).

Semi-structured interviews were used for the collection of data process since it afforded the research a first-hand experience from the selected grade 3 teachers. According to Parker (2011), semi-structured interviews resemble everyday’ s conversations. Therefore, interviews are suited to the process or experience-type research questions about the meaning of events and activities used in the study (Seidman, 2013; Braun & Clarke, 2013; Brinkmann & Klave, 2015). Qualitative research is the study of meaning and requires access to subjective interpretations that people attach to their objective circumstances and this is provided using semi-structured interviews (Brinkmann and Kvale, 2015).

However, there are several drawbacks with interview methods. Magwa and Magwa (2015) accentuate that there is a possibility that some interviewees would want to give responses which they think would please the researcher, hence defeating the objective purpose of collecting data. Furthermore, the power relationship that exists in the interview situation should be closely monitored (Tabane, 2016) as participants might also feel compelled to answer even though not comfortable. Therefore, Tabane (2016) suggests that researchers ought to be considerate of their possible limitations in conducting research. Therefore, interviews are normally prepared with a script or interview guide that structures the course of the interview (Galletta, 2013).

An interview guide was used as it structured the course of the interviews more or less tightly. The advantage of using an interview guide is that it allows the researcher to collect the same general information from individual participants and yet it is sufficiently flexible to allow the researcher to consider perceived prompts from the participants (Rubin & Rubin, 2011).

In this study, one-on-one semi-structured interviews were conducted every after school teaching hours, from a decided and agreed upon time, date and rendezvous with the participants. This process was conducted in a separate, private rendezvous where privacy was of utmost importance. The one-on-one semi-structured interviews session took one hour (60 minutes) per participant, every after schools' teaching and learning time. All the interviews were audio-recorded after permission was granted by the participants and independently transcribed by the researcher.

Initially, there were 24 participants who had agreed to participate in this study, but five withdrew during the process of their participation. Firstly, they had agreed and signed the consent and confidentiality agreement forms, but before the time of interviews, they withdrew their participation. Therefore, the researcher had to continue with the remaining 19 participants owing to time factor.

### **3.6.3 Focus group discussion**

According to Finch, Lewis and Turley (2014), the term FGD is used to refer to conversations between three or more people, that is, the researcher and at least two or more participants. Furthermore, a FGD is defined as a small gathering of individuals who have or share a common interest or characteristics and are assembled by the researcher who uses the group and its interactions as a way of gaining in-depth information about a specific or particular topic (Tshuma & Mafa, 2013). Van Esch and Van Esch (2013) concur with this view by indicating that FGDs allow participants to share their views, experiences and convey their actions freely and openly, which was the case in this study. Tabane (2017) further emphasises that focus group technique gives participants an opportunity to extend their views while listening to others.

A FGD involves a small homogenous group of people with a moderator who asks a set of targeted questions designed to obtain collective views about a specific research topic (McMillan & Schumacher, 2010). It was noted by some scholars that two perspectives affected the design of focus group and the kind of evidence that is generated (Belzile & Oberg, 2012; Ryan, Gangha, Culbertson, & Carlson, 2013). This first perspective is the individualised social psychology perspective which disregards group interaction in data analysis. The second is the social constructionist perspective that regards group interaction as vital when analysing data (Belzile & Oberg, 2012). A narrative type of data analysis was therefore adopted to capture the multiple meanings and richness of the conversations (Morgan, 2012; Ryan, Gangha, Culbertson, & Carlson, 2013). This study utilised the latter, namely the social constructionist perspective approach, which subordinates the role of the moderator so that participants were able to create narratives of their classroom experiences of teaching grade 3 learners perceived to have ADHD spontaneously. FGDs are characterised by carefully planned discussion of a topic (Tabane, 2017). In this study, FGDs were initially planned to be conducted at each of the other four participating schools. However, eventually, only three schools participated.

The size of the focus group can vary depending on the mode or age of the participants. Barbour (2014) mentions that membership of an ideal focus group should range from six to 12 participants. In the case of participants in this study, the size may be greater, say six to eight participants (Ryan et al., 2013). The second important issue regarding focus group sample size is the number of focus groups in a research study. Krueger and Casey, (2010), however, recommends three to four groups per category of participants in a research study and in this study a focus groups were made up by 4 – 6 number of participants in three of four schools due to their availability. However, in the fourth school, there were only two participants who availed themselves for the group discussion. Therefore, the fourth school could not satisfy requirement to form a required number of participants and to take part in the FGD. Therefore, the fourth school was excluded in the focus groups.

To maintain confidentiality in the FGD, the researcher requested participants to fill in and sign the confidentiality agreement form for group sessions which bound them

to keep all information that came from the groups confidential and to keep individual identity and that of other members confidential.

Ryan, Gangha, Culberson and Carlson (2014) indicate that FGDs have a number of limitations such as biases and manipulations, false contenting, difficulties in distinguishing between an individual view as compared to a group view, difficult in the analysis and interpretation of the results. The researcher, therefore, used other data collection methods like face-to-face semi-interviews and the questionnaire alongside the use of FGD to ensure data triangulation.

Focus groups were conducted with participants from the three Soweto mainstream primary schools. This was done to gather in-depth views from the participants (see appendix J). All the participants were informed on time with regards logistics around time, date and rendezvous for the FGD. At the FGD, participants were reminded of the research aim, ethical issues and that confidentiality and anonymity (use of pseudonyms) were to be upheld throughout the entire study and discussion process.

The FGD lasted for one and a half hours (90 minutes). One downside regarding FGDs is its susceptibility to “group think,” which is the tendency for participants to withhold vital information (Babbie, 2011; Rauf, Baig, Jaffery, & Shafi, 2014). To minimise this negative effect of “group think”, that is participants responding following either the first respondent line of thought or supporting or silenced by the most verbal participant. Some scholars have suggested that the moderator could play a devil’s advocate (George, 2013). In this study, the researcher used this strategy to encourage the focus group participants to look at other alternative explanations with reference to their responses.

#### **3.6.4 ADHD-specific knowledge and attitudes of teachers (ASKAT) questionnaire**

Mulholland, Cumming and Jung (2015) developed the ADHD-specific knowledge and attitudes of teachers (ASKAT) questionnaire administered in this study (see appendix M). The ASKAT questionnaire is divided into four parts, namely, part A, B, C and D. Part A had demographic questions with 11 items; part B had scale for ADHD-specific knowledge (SASK) with 20 items; part C had scale for ADHD-specific

attitudes (SASA) with seven items that consisted of a number of sub-sections and part D had open-ended questions comprising of five open-ended questions. As this study is qualitatively inclined, part D was deemed appropriate because this section allowed participants to explain themselves openly about their respective experiences of learners perceived to have ADHD. Therefore, shedding vital information with regard to participants' knowledge and attitudes in teaching learners perceived to have ADHD.

The five open-ended questions found in part D are as follows:

- How would you describe learners who display hyperactivate behaviours?
- How would you describe learners who display inattentive behaviours?
- What do you think about ADHD and its associated behaviours?
- What strategies do you use in your classroom to manage behaviour of learners perceived to have ADHD?
- Why?

The ADHD-specific knowledge and attitudes of teachers (ASKAT) – Part D also contributed to saturate and triangulate the data. Participants were given the ASKAT as a self-administered questionnaire to complete and return at a specific date and times.

### **3.7 DATA ANALYSIS PROCEDURE**

#### **3.7.1 Data transcription**

Qualitative data analysis is the logical method of coding, categorising and interpreting data to provide clarifications on the topic of interest (McMillan & Schumacher, 2010). The researcher needed to adopt a strategy to transcribe the interviews, FGDs, fieldnotes and the questionnaire before engaging in data analysis. There are various ways of transcribing depending on the goal and intention of the study (Ten Have, 2007; Kowal & O'Connel, 2014). This study utilised the verbatim transcription so that themes could be generated from the data and to meet ethical requirements, that is, to make the transcription be as close to the conversation between the interviewer and the interviewee as much as possible (Runswick-Cole, 2011). Qualitative data analysis is regarded as an ambiguous term

(Bernard & Ryan, 2010), but in the context of this study, it means the interpretive study of interviews, FGD, observations text and the questionnaire. The researcher in this instance, was able to extract deeper meaning or multiple meanings from the text.

Analysis of data involves the breaking up of data into manageable themes, patterns, trends, and relationships (Mouton, 2002). Such a process necessitated that transcriptions of all the recordings carried out be transcribed (Holloway & Wheeler, 2002). Furthermore, qualitative data needed to be coded, by means of categorisation and analysing all the details collected in the study.

To avoid and prevent confusion between the researcher's viewpoints, personal experiences and participants' experiences, the researcher should, according to Holloway and Wheeler (2002), "bracket" one's viewpoints when writing the report. Creswell (2003) contends that when the researcher does the "bracketing" the views of the participants become clearer and more salient, suggesting transparency and avoidance of pre-judgement on the part of the researcher. Tabane (2016) postulates that researchers ought to be considerate of their possible limitations in conducting research.

When analysing interviews, FGDs, observations fieldnotes texts, and the questionnaire for meaning and language, the researcher could use a narrative approach (Denzin, 2009; Bernard & Ryan, 2010; Creswell, 2013; Seidman, 2013; Hennink, 2014; Esin, Faith, & Squire 2014; Barbour, 2014; Roulston, 2014; Brinkmann & Kvale, 2015). Creswell (2013) and Roulston (2014) concur that the narrative approach informs the analysis of interview data in a number of ways. The first way involves the examination of the story told by participants thematically, meaning what was said and structurally, meaning the nature of the telling. The second way of analysing narrative stories is the dialogic, that is, who the story was directed towards. The approach involves analysing empirically derived narratives for the purposes of generating themes.

### **3.8 ETHICAL MEASURES**

Ethics deals with what is deemed morally right or wrong in certain procedures. An acceptable code of conduct, determined by research requirements, needed to be adhered to by the researcher conducting the research (Mouton, 2002). What needed to be ascertained therefore was, which criterion were right or wrong being measured. Ethics are processes conforming to set standards of conduct of a given profession, or a morally correct behaviour. Therefore, the ethical behaviour of any researcher was to be based on the moral value fabrics of the society under study, this implied that what may be morally correct in one situation may not be morally correct in another. Thus, it would be very logical to assume that taking into consideration the general agreement that was shared by the researchers regarding proper and improper research conduct in scientific research, would be appropriate (Sullivan, 2009).

Ethics in research relates to the principles and guidelines that help us uphold the things that we value and guide research with the aim of protecting the rights of participants and focuses on principles rather than fixed rules and have been developed to balance two competing values, the pursuit of scientific knowledge and the rights of the participants (Sullivan, 2009). McMillan & Schumacher, (2010) and Creswell, (2013) consider that research is ethical only if it conforms to the set standards of conducting scientific enquiries. Ethical issues which were considered for this study are permission, authenticity, informed consent, confidentiality, anonymity and harm to participants, which are discussed in detail here under.

### **3.8.1 Permission**

The researcher needed to submit formal requests to relevant authorities in order to have access to all research sites. From a research perspective, the researcher would be expected to prepare a shot statement specifying the purpose of the study and its design, the research sites, the participants and types of activities to be engaged in, the protection of human subjects and informed consent forms for adults and/or assent forms for minors (McMillan & Schumacher, 2010).

For this study, ethical clearance certificate number 2017/08/16/53972562/13/MC (see appendix B) was first obtained from the Review Ethics Committee (REC) of the University of South Africa (Unisa). This was followed by an approval letter which

was sought and obtained from Gauteng Department of Basic Education (GDE), for the collection of data after presentation of proposals and all relevant documents from the supervisor supporting the application to undertake the research were submitted (see appendix C). Permission was requested from the four districts (see appendix D) and the principals (see appendix E) of the prospective participating Soweto mainstream primary schools to take part in this study.

### **3. 8. 2. Authenticity and protection of the environment**

Authenticity is regarded as a true reflection of people, events and places. It is the ability to reflect on the circumstances under research through the eyes of the participants (Gomes, 2004; Sullivan, 2009). To establish that, the researcher requested the participants to check whether the interview questions and observations were authentic. They were also requested to read through the transcripts and had to indicate if there was anything they felt was not a true reflection of their feelings or opinions. The purpose thereof was to make certain that there was authenticity of the participants' perceptions allowing for a correct interpretation of their viewpoints. This report was professionally edited and a critical reader will be appointed to entail its total trustworthiness.

In examples where research involved and focused on the environment, in such cases the grade three teachers' classroom experiences of learners perceived to have ADHD, and the types of intervention employed, it was vital that the researcher's research work remained non-invasive (Gomes, 2004). In the same frame of mind, according to Ah Hing, (2006), the participants' external environment must be equally protected against any external influences that might possibly happen as a result of the research study.

### **3.8.3 Informed consent**

Informed consent is an overt indication of one's willingness to participate in a research study and the understanding of such participation (Sullivan, 2009) as well as the understanding of such participation. The purpose of informed consent is to protect participants from any harm. In addressing the ethical issues of informed consent, researchers should at all costs ensure that the participants are informed



about the purpose of the study as it was the case in this study (Kumar, 2012; Creswell, 2013; Willig, 2013).

The researcher needed to disclose full information about the purpose of the research to avoid deceiving the participants (Brinkmann & Kvale, 2015). However, on the other hand, informed consent also invokes the question of how much information should be given and when. A proper and careful balanced information should be maintained between too much information and leaving out some aspects of the design that might be of significance to the participants.

In this study, the researcher fully informed all the participants about the purpose of the study, also highlighted that the participants' participation was voluntary and that participants were free to withdraw from this study at any time during the interviews, FGDs, observations and the completion of the questionnaire without any penalty. Participants were interviewed or included in the FGDs after they had signed consent and confidentiality forms.

#### **3.8.4 Confidentiality**

Confidentiality refers to participants' rights to obtain an assurance that identified information will not be accessible to anyone who is not directly involved in the study. Confidentiality is created when a researcher is able to identify the participants' responses but protects them by keeping the data from the public domain or does not disclose in any way information that permits linking certain individuals with specific responses (Babbie, 2011; Neuman, 2011). The main ethical concern with the use of FGDs method, is that there is more than one participant in an assembled group at a time (Liamputtong, 2011).

In that instance, certain participants might disclose vital contents of a confidential discussion outside the group. This study addressed the issue of confidentiality at length by assuring the participants that reports would not contain any information that could be used to jeopardise that situations and to identify them. Participants were assured of confidentiality in the sense that it would be adhered to as a principle of research. This study made certain that it removed all identifiers during data collection and data cleaning to uphold the principle of privacy of all the participants.

During every FGD, the researcher commenced every FGD by requesting participants to respect the principle of confidentiality of all group members.

### **3.8.5 Anonymity**

One of the most vital principle of research ethics is anonymity. This implies that the participants' identity will be kept anonymous or unrevealed in any way throughout the study, if possible, even to the researcher (Creswell, 2013). This is an ethical protection principle that makes sure participants remain nameless, their identities are free from disclosure and remain so (Neuman, 2010). FGDs present challenges on the issue of anonymity. According to Kamberelis and Dimitriadis (2013), the public nature of focus groups problematises the issue of anonymity as well as theories of self upon which the very ideas of anonymity is grounded. In this study, the researcher brought to the attention of all participants at the commencement of every focus group that the contents of the FGD should at no stage go beyond group members.

This type of procedure with reference to assuring participant anonymity was repeated for participants in the in-depth one-on-one interviews as well. During reporting of the outcomes for this study, the researcher used pseudonyms (fake names) for participants and codes for the school sites where data was collected (Creswell, 2013). The purpose of anonymity of the participants is to attempt to provide a safe platform and environment for participating individuals to release what they are actually thinking and feeling. This becomes particularly true when they are asked about sensitive issues (Babbie, 2011). Participants were assured of anonymity in that their names or those of their schools would not be used in any way and anywhere in the study, instead, pseudonyms would be used in the study's report.

### **3.8.6 Harm to participants**

Non-maleficence is an ethical principle which seeks to make certain that researchers have an ethical obligation not to cause harm to participants in a research study (Munro, 2011). Research that involves sensitive issues, distress and emotional harm may occur, and one strategy that is recommended is that, in focus groups, the moderator needs to observe stress levels of participants and be able to

be well prepared to intervene (Laimputtong, 2011). Creswell, (2013) suggests that, to avoid harming participants, researchers should avoid disclosing vital information that could cause harm to participants, researchers should also utilise composite stories so that individual participants, cannot be identified.

In this study, the researcher conducted in-depth interviews and FGDs mostly in offices and classrooms suitable to all participants and respectively provided by the schools. The participants were therefore safe from any physical harm (Neuman, 2009). The researcher took precautionary measures by informing participants in both in-depth interviews and FGDs, that counselling will be provided in case participants experienced some form of emotional distress during or after any interview or FGD sessions. A counsellor was arranged in advance to be available at every school. The moderator minimised risks and harm by avoiding deceiving the participants.

### **3.9 CREDIBILITY AND TRUSTWORTHINESS**

Trustworthiness was seen as an indication of methodological reliability and soundness in qualitative research (Babbie & Mouton, 2001; Holloway & Wheeler, 2002), and that was comparable with the aspects of reliability and validity in quantitative research. Showing trustworthiness of a research study was illustrated by the researcher's ability to persuade the reader/s that the research findings were reliable, important and worth considering. According to Thomas, Nelson, and Silverman (2005), for a study to be reliable and valid, there must be credibility, transferability, dependability and confirmability. These criteria are discussed and explained below:

#### **3.9.1 Credibility**

Credibility refers to efforts of establishing confidence in an accurate interpretation of the meaning of data (Creswell, 2013). True value or credibility relates to questions such as: Do conclusions of the research make sense? Do conclusions authentically represent the phenomena of interest? Do conclusions adequately describe research participants (Creswell, 2013)?

Credibility was reached when the context, participants and settings were interpreted and presented truthfully. By using a wide range of various tools to gather data, the information obtained was clarified and reinforced to make certain that the outcomes of the report were a true reflection of what was seen, heard, discussed, interpreted, and analysed. In this study, credibility was established through a prolonged engagement with participants, triangulation of information from various data sources, member checking and using participants' own words to justify themes.

### **3.9.2 Transferability**

Transferability refers to the applicability of the findings to other contexts and attempts to establish if the results of the study relate to other contexts and could therefore be transferred to other contexts (Braun & Clarke, 2013). The qualitative descriptions of the findings and context allow others to judge whether the outcomes or results of the research are meaningful within their settings. Although this study was conducted at only four mainstream primary schools in Soweto, transferability can be apparent when the results obtained could be identified in other educational settings around Gauteng Province (GP) or within the other eight provinces of the Republic of South Africa.

### **3.9.3 Dependability**

Dependability was assured by the range of data collected, which made it possible for all the responses to be carefully considered. The use of focus groups, individual interviews, observations, as well as the questionnaire and participants' perceptions to acquire information on the topic improved the degree of confidence in what was seen, heard and read. The audio-recorder allowed the true voices of every participant involved to be heard and enabled the researcher to compare the participants' perception raised on grade 3 teachers' experiences of learners perceived to have ADHD and the types of intervention employed when teaching such learners. Confirmability was evident when the researcher acknowledged one's biases prior to data capturing.

The researcher had to consciously ignore one's opinion and assumptions when collecting and interpreting information from the participants to ensure objectivity at all times. The aspects affecting the successful supervision and management of learners perceived to have ADHD were neither preconceived nor predetermined

and it was imperative not to be influenced by the experiences and feelings to work well with the participants and remained open to all that was seen, heard and read so that the data collected were a true reflection of what was happening in the grade 3 classroom settings. Any conclusion reached could be seen to be relevant.

#### **3. 9. 4            Confirmability**

This was evidently assured by acknowledging the researcher's personal bias prior to data capturing. The researcher had to consciously ignore one's own opinions and assumptions when collecting data from participants to ensure objectivity at all times (Braun & Clarke, 2013). In this study, for instance, the aspects affecting grade 3 teachers in terms of their classroom experiences when teaching learners perceived to have ADHD in classrooms settings and interventions employed were neither preconceived nor predetermined. For that matter, it was imperative not to be influenced by the feelings and experiences of all participants. This was made easy for the researcher to work well with the participants and to remain open to all that was seen, heard and read so that the data collected were a true reflection of what is happening in grade three classrooms and school settings. Any conclusion reached could be seen to be relevant.

### **3.10 REFLEXIVITY IN QUALITATIVE RESEARCH**

Reflexivity implies that the researcher must reflect on one's personal bias, values and background since these might affect his/her ultimate interpretations of the research undertaken. In the process the researcher monitored the participants and one's own reactions to the data gathered. The researcher considered one's personal background, upbringing and experience in comparison to that of the participants (Creswell, 2014). This enabled the researcher to internalise and give a non-bias interpretation of the research.

### **3.11 CONCLUSION**

This chapter addressed aspects related to the research methodology implemented in this study. A detailed description of the following aspects was presented, namely, paradigm, the problem statement, the aim of the study, research design, site selection, data collection methods, population sampling, sampling, and data

analysis procedures, ethical measures, validity and trustworthiness and reflexivity in qualitative research were discussed. In the next chapter, data analysis and presentation of findings will be discussed.

## **CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS**

### **4.1 INTRODUCTION**

In this chapter, data analysis method and the findings are discussed based on the data collected during the in-depth interviews, FGDs and the use of an ADHD-specific knowledge and attitudes of teachers (ASKAT) questionnaire on grade 3 teachers' experiences of learners perceived to have ADHD and interventions strategies employed (if any) in Soweto mainstream primary schools.

### **4.2 DATA ANALYSIS**

De Vos, Strydom, Fouche, and Delport (2011) refer to data analysis as a method of categorising, manipulating, ordering and summarising data to attain answers to specific research questions. Therefore, data analysis, organisation and interpretations were done to identify the units of meaning related to the study. Audio-recorded data were listened to on numerous occasions and at a later stage, the recorded data were transcribed verbatim. The researcher read and broke down the text into meaningful units. The recorded data were listened to and transcripts read numerous times to get to an in-depth understanding of its content and context. Thereafter, themes were developed.

According to Nowell, Norris, White, and Moules (2017), qualitative thematic analysis as employed in this study, is a powerful yet flexible method of analysis that empowers researchers in an attempt to find out about participants' lived experiences, thoughts, or behaviours across a data-set in a rigorous and thoughtful way through what participants say within the FGDs and interviews. In this study, thematic analysis is employed as a method that focuses at analytically examining narrative materials from participants' life stories by breaking text into relatively small units of content and submitting them to descriptive treatment (Kiger, Meyer, Hammond, et al., 2019).

Clarke and Braun (2017) posits that thematic analysis is a practical data analysis process of identifying patterns or themes within qualitative data and is a method

rather than a methodology for analysing qualitative data that can be used within a variety of paradigmatic or epistemological orientations. This means that, unlike many qualitative methodologies, it is not tied to a particular epistemological or theoretical perspective. This is a process that enables the researcher to make sense of the data by consolidating, reducing and interpreting what research would have said and what the researcher would have observed and recorded (Dube, 2015) and thorough analysis of research data would bring a clear understanding of the issues arising from these data (Magwa & Magwa, 2015).

### **4.3 RESEARCH FINDINGS**

#### **4.3.1 Poor time management**

Time management is one of the most essential requirements that needs to be adhered to as it influences one's daily functions and as learners, this can affect their academic performance, socialisation and learner-teacher classroom interactions. Furthermore, poor time management can disrupt lessons as learners come to class late. Late coming disrupts lessons that are already in progress and forces all involved to pause and all must at that time gather their thoughts, find their last point of discussion and concentration. Most of the participants lamented that late coming of such learners affected the entire flow of teaching and learning and therefore, disturbed and distracted the other learners' attention and concentration within the classroom. Participant 15 commented as follows:

*Late coming causes a stop and go situation during lessons. When the late comer comes in, the teacher and other learners have to all stop what they are doing, look at the door to see who is coming in. At that time, everyone stops what they are concentrating on and focuses on the late comer. The other learners are waiting to hear what the teacher will say to that learner, teaching and learning comes to a stop.*

Participant 1 stated that it is really disturbing to halt lessons because of these late comers. As teachers, we teach according to timeframes. You miss the timeframe, you have missed the way forward. ADHD is associated with poor time management and therefore, these learners are more likely to be late to school and disrupt lessons. This view is supported by Rayburn (2018) and Low (2020) who purport that, poor



time management by learners perceived to have ADHD is owing to the now versus the not now effects. They indicate that this is caused by the brain which is wired for stimulations. In other words, such learners view the world through two-time frames, namely, the now and the not now. The now is whatever is in front of the learners at that moment; for example, tasks they act on at that time and the not now, is everything else no matter how high a priority or essential it is to the learners' success. Learners perceived to have ADHD have attention span, impulse control and activity level and are therefore, owing to such learners' time frame of the not now effect that causes them to be unable to manage their time and as such arrive late to class, therefore, causing lesson interference and disruption.

The teachers' work in such instance become more demanding when they have learners such as those in their classrooms because teachers and other learners' attention should now be focused on such learners. In his new edition book entitled *Taking Charge of ADHD (2020)*, Russell Barkley suggests that not only do children with ADHD struggle with many of the issues which are becoming more widely known, but they also have a poor concept of time and future. In other words, such learners lack the skills and abilities to be able to locate their actions within a framework of the present. Participant 10 made the following utterance:

*Most of the times I am lacking behind or rushing to complete a particular topic because of late coming that disrupts the whole class. We, the grade 3 teachers teach according to times allocated for every aspect of the curriculum for that day, remember that Gauteng Primary Literacy Strategy (GPLS) guides our teaching and learners' learning. So late coming of such learners causes disruptions. These are frustrating and challenging situations we teach under.*

In support of the view raised by participant 10, participant 1 reported that she would allow late coming learners to come to class and that such learners need to apologise to other learners and say why they are late. She went on to say, unfortunately, it is difficult for her to go back and explain what has already been taught because of GPLS. She indicated she would continue with her work and will not start at the beginning of the lesson for the sake of the late comers. For example, she mentioned a lesson on counting. Participant 10 stated that she would move on and give the

late comers work to do. She mentioned that there was just too much work for her to be done given the time frames.

Participant 17 stated that learners perceived to have ADHD can distract and frustrate teachers. She mentioned that when such learners come to a classroom, a teacher cannot turn a blind eye as if nothing is happening. She further lamented that as a teacher you must stop teaching, ask late comers questions and other learners during that moment are disturbed, distracted and your attitude as a class teacher changes towards such learners as they are distracting everyone in class at that time.

Keath (2019) explains that everyone procrastinates at a certain given time. That happens when they are faced with tasks they just did not want to do. For example, the task of having to wake up by learners perceived to have ADHD is a mammoth task. Keath (2019) maintains that many school-going learners with or without ADHD and those perceived to have ADHD struggle with procrastination. Procrastination can cause many challenges and problems in the classroom for teachers, such as, disturbing teaching and learning and concentration on the tasks at hand by learners.

To address late coming of some learners, most participants shared the view that they would facilitate a joint after school meeting with parents and guardians of concerned learners. However, according to participant 2, there are no parents or guardians coming forward to explain the reasons that keep such learners from coming to school on time. This makes it difficult for the teachers to assist such learners in identifying what their challenges are, at home and not handing in homework or projects on time. In the extreme, teachers according to participant 18 end up labelling the child or learner as a slow learner or a learner with cognitive challenges. In contemplating the causes of learners coming to her classroom late and teaching strategies to implement in her classroom, participant 4 expressed her views as follows:

*In my personal experience, I actually want to find out what the reason is for the learner to come late and after the findings. I will devise means for the learner to catch up with what was done. I will make some time after school to let the learner catch up on the work that had been done, and as a teacher you have to follow-up on what causes the learner to be late. You have to look*

*at how often does that happen because it cannot happen that the learner is every day late. So, you have to find out and write a letter to the parents or either call the parents to school to find out.*

Participant 3 explained as follows:

*What I normally do when the learners arrive late in my class, I would greet them and if it happens for the second time, I would then ask the learners to give reasons. If it happens for the third time, I would write a note to the parents so that I have a talk with them to find out what the problem is and try to assist the learner and the parents.*

According to Wolraich and DuPaul (2010) as well as Piffner (2011), one of the symptoms of ADHD is attendance to tasks without understanding what is required. These types of learners are impulsive and at times answer before the teacher completes the question. When they arrive late for lessons, they write whatever is written on the chalkboard by just rushing through it, for instance, without understanding because when it was explained, they were not there in the classroom. In most cases, such learners lack the capacity to control their impulse and attend to activities systematically which includes asking clarity seeking type of questions when there is a need.

In agreement with one of the participants, participant 16 indicated as follows:

*I totally agree 100 percent. Yes, I would follow-up if the behaviour continues and if the learner continues coming late, then I would call the parents, talk to the transport driver, as learners use transport to come to school and further see if the problem is with the driver just to check why the driver brings learners late to school. I will make the driver aware that learners need to come on time because they are missing out on a lot of school work.*

Participant 10 and participant 13 had different views in approach to learners' late arrival for lessons: Participant 10 said:

*Firstly, I allow them in class so that they will not disrupt and then get them through the work that has been done so that I accommodate them for the rest of the day.*

In addition, participant 13 went on to explain as follows:

*It becomes a different challenge every day. You do not know what is going to happen. This is what you expect and have planned for, but when you get in there, it becomes unpredictable. You have to go through the rules and make sure the learners understand them. You have to accept it and try to deal with the late coming situation and move on with the lesson.*

Participants had diverse ways of handling late coming by learners perceived to have ADHD. It is however clear from most of the participants' comments that there is also too much of curriculum content to be delivered to learners and more administrative work to be done. Therefore, their interventions while well intentioned to assist such learners, are however pressurised to complete curriculum requirements to meet the expected outcomes, goals and timeframes set out by all other education stakeholders.

Some participants showed signs of being accommodating learners who constantly arrive late to class for lessons. Participant 17 said:

*I would allow the learners to come in the classroom so that they will not disrupt teaching and learning and would get the learners through the work that has already been done to accommodate them for the rest of the day.*

Nierman and Scheres (2014) assert that there is a relationship between procrastination and symptoms of ADHD. They mention that about 75% of individuals with or depicting symptoms of ADHD are classified as procrastinators. They also mention that school-going children with symptoms of ADHD were in most cases reluctant to get going before they wake up for classroom activities. Petersen (2016) concurs that people with or perceived to have ADHD are procrastinators who do not

get started on tasks until there is a sense of urgency. However, if they start a task late, there is a good chance they are going to finish that task late.

Petersen (2016) mentions that since learners perceived to have ADHD struggle with planning ahead, they are likely not to think about tasks they have to perform until they are really pressing. When going somewhere, for example, to school in this specific case, they might not start getting ready to leave until there is a danger of being late. Most participants were adamant in stating that it affected the flow of teaching and learning and disturbed and distracted other learners.

Participant 9 indicated that after the learners' explanations, she would devise ways to make up the lost time during the lesson through a catch-up plan, to assist such learners and further devise means of addressing the course of late coming by involving the parents in a solution seeking exercise. Participant 9 said:

*I will actually find out the reason for the learners to come late and after the findings, I think of what I can do for the learners to catch up with whatever has been done, maybe has missed something in the class. I will make some time after school to catch up on work that we have done. I have to follow-up on what makes them late, look at their situation because it cannot be that the learners are late every day. So, you have to find a way and write a letter to the parents or either call the parents to find out or maybe it might be the transport, their parents go to work early, that is the situation most of the learners face. Parents leave early for work and they have to dress themselves up while the parents are gone.*

Barkley (2015) argues that the "impaired sense of time sometimes leads to problems with getting started. He mentions that people with ADHD have trouble estimating the time to complete a task such as, for example, the task of having to wake up and prepare for school or work. He further indicates that there can be several ADHD-related factors that lead to procrastination, including distractibility, forgetfulness, disorganisation, problems with prioritising, sequencing and time management.

Some participants in this study lamented that they were going through stressful and nerve-racking times, especially when teaching among others' learners perceived to

have ADHD. Participant 11 mentioned that for her it was difficult and frustrating because of the implementation of GPLS. Participant 11 failed to explain and remember what GPLS is and its intentions in a classroom setting. However, the researcher investigated and established that GPLS is a provincial programme for selected primary schools within Gauteng responding to the national call in raising literacy levels of learners, particularly at that developmental age of the learners and that teachers involved are therefore, provided with all the necessary materials, such as lesson plans; assessment tools; reading books of different levels and so on, that they would need to ensure that the programme becomes a success. Despite not knowing and remembering what GPLS is, participant 11 indicated that it needs a teacher to work within given timeframes. She mentioned that after every 30 minutes, a teacher needs to tackle another topic or subject and then after, the teacher must go back to literacy. So, for her it is difficult to accommodate these types of learners within this programme. Most of the times the learners fall far back.

Participant 8 mentioned that

*It is very annoying, disturbing and frustrating to be distracted by these late coming learners. These are actually learners who are not up to speed with what is going on in class during teaching and learning. They are strugglers and attention-seekers and because there is no time, I just cannot go back to assist them so that they are able to catch up. I have to assess at a given time and submit work that I have done within a given time to our school authority. I am actually running a teaching race here and forgetting about our learners. These are anxious moments for some of us.*

Poor time management can be one of the most annoying and distracting symptoms of ADHD both for learners perceived to have the disorder and all involved in the classroom.

#### **4. 3. 2            Overcrowded classrooms**

Several factors contribute to overcrowding in classrooms in Soweto mainstream primary schools. These include the lack of teacher personnel and inadequate

infrastructure, such as insufficient schools owing to merging of schools and enough classrooms to accommodate learners' enrolment. As a result of these, it is the classroom teachers who must carry the heavy burden of having to face such type of overcrowded classrooms during their teaching practice.

An overcrowded classroom does not allow for the teacher to have enough personal office space for lesson preparations and other administrative duties to perform. Participants in this study raised issues of very high classroom learners' enrolment that cause challenges during teachers' interaction with their learners. It can, therefore, be argued that overcrowding may have some negative effects for both the teachers and learners, especially those perceived to have ADHD. The four primary schools in Soweto that participated in this study exceeded the national required ratio of 1:40 for primary schools (National Education Policy Act, 1996). Participant 17 indicated that it was very stressful, disturbing and appalling to find oneself in a classroom with fifty-nine (59) learners to teach, especially when there is a high possibility of having learners perceived to have ADHD.

Participants in this study lamented that they teach in an environment that is not conducive for teaching and interaction with their learners to give them enough time to devise appropriate intervention, if any for specifically for learners perceived to have ADHD. They teach in mainstream primary schools and have close to 60 learners to teach in a grade. In sharing her experience, participant 17 said:

*My classroom is piled up with 59 learners and the space is not very big to bring a lot of other learners in. It is just not proper and conducive for the teaching and learning of learners and myself as their teacher.*

According to participant 17, the conditions they work under are emotionally taxing and frustrating and said:

*It is a frustrating classroom situation we work under and in most of our overcrowded classrooms, we have these types of learners who seem to have this disorder and are very problematic, disorderly, not attentive, lack concentration and misbehaving in most instances. But what can I do, I have to teach.*

Participant 7 also shared these feelings of defeat and despondency when buttressing that the following:

*As my colleague has already indicated that our classrooms are overflowing due to the reasons given. It is very frustrating to work daily under such crowded classrooms, worse with such young children. I am not able to move around and check on learners' work or go to a learner that I suspect not to be doing work the way the classroom is full.*

Participants maintained that overcrowded classrooms acted as stressful and frustrating barriers to a meaningful curriculum delivery to their learners. This view is supported by Lee and Witruk (2016) who lament that overcrowded classrooms affect teachers' confidence, moral, competence and delivery of the curriculum content owing to its congestion. Participants indicated that such learners' discipline in an overcrowded classroom affects their teaching process. In most instances, teachers do not complete the themes for particular periods. This is caused by the number of learners in an overcrowded classroom being huge. Participants felt it is very difficult to prolong their teaching in an effective and meaningful way to attain the specific objectives of the lesson. According to Gee (2016), overcrowded classrooms are a hinderance to achieving teaching and learning outcomes. Increased classroom size does not only bring swelling mounds of paperwork, such as grade homework, but also creates less physical space per learner in the already overcrowded classroom. Participant 4 said:

*It is a stressful and frustrating situation to teach in such crowded classrooms. I cannot even move around freely to monitor learners because there is not enough space to do so. Sometimes I want to go and check if a learner is doing work or not, especially the so-called problem ones, but I just cannot. All I can do is to speak aloud to that learner.*

Gee (2016) further postulates that a large classroom also means less time for the teachers' attention to individual learners. This brings more challenges to the already difficult job of teaching and worse for learners' classroom learning. Therefore, the teachers' teaching abilities to meet the individual learners' educational needs gets



impacted especially when having to face learners perceived to have ADHD in one's classroom. Participant 13 mentioned:

*Due to desks that are crammed in my classroom and accommodating a large enrolment, learners are not comfortably seated and have to share desks and chairs meant for only two. A classroom can only afford a maximum of 20 desks and 40 chairs, now with the extra ten, 15 or 20 learners being allocated particular grade 3 classrooms, it is not conducive for both teachers and learners. Now you can imagine how frustrating and stressful you become as a teacher.*

Research findings from Al-Jart (2006) study indicate that overcrowded classrooms have negative effect on teachers and learners in that the teachers are unable to satisfy the learners who have various needs, personalities and capabilities. Learners are therefore, not given timely effective feedback and proper evaluation. Moreover, learners are not afforded or provided equal opportunities when participating in actual classroom practices. Participant 10 agreed as follows:

*I cannot move freely to monitor all the learners. Learners themselves with their bags on the floor cause frustration for me and probably with some learners who find themselves squeezed together.*

Participant 2 indicated that, “*because of overcrowding in our classrooms, there is limited space for movement of both the teacher and learners to do practical tasks.*” Teachers with overcrowded classrooms may have to spend most of their times demanding learners' attention and concentration on issues relating to classroom management activities to regulate learners' activities in a proper and professional way, rather than in teaching and therefore affecting the completion of the curriculum. The study argues in support of the preceding views from participants by indicating that in such instances, learners in overcrowded classrooms tend to become uncontrollable, rowdy, noisy, and unable to perform their classroom work activities with regards their teachers' instructions.

Teachers seem not to give their learners enough individual instructional attention to alleviate learners' task challenges as indicated by participant 10. Most participants

in this study indicated that they felt stressed and frustrated as there was an inability of learners especially those suspected to have ADHD owing to the learners' ADHD symptoms depicted in classrooms, to fully concentrate or stay on their tasks while in classrooms. Overcrowded classroom situations have increased possibilities for at risk learners, particularly those perceived to have this condition to lose interest in activities as well as school.

Overcrowded classrooms create obstacles in the progressive activities of classroom teaching and learning process for both teachers and learners. The study maintains that the objective of teachers should be to treat every individual learner in a proper way to regulate the learners' activities and develop their inner personalities, not only that, but the teachers also have to give learners widest opportunities to develop their skills and abilities at the optimum level. Participant 6 mentioned that individual teaching is practically not possible.

Data from participants are almost the same regarding classroom learners' enrolment challenges for both teachers and learners. Therefore, their data were fused together. Most of the participants highlighted issues of stress, frustration, not being able to attend to their learners on an individually basis. The researcher avoided a repetition of the same responses. All the participants' experiences owing to overcrowding of their learners in classrooms impact on their morale in a deleterious manner. Learners perceived to have ADHD can take too much of teachers' teaching time, as such teachers might become overwhelmed and learners left unsupervised.

Participants looked concerned as they raised their voices and most of the time during interviews, some shook their heads in disbelief. It is difficult to count all the problems regarding overcrowded classrooms. However, there are certain problems which may look small from a general point which may badly affect teaching and learning processes. Certain problems related to overcrowded classrooms cannot be ignored at any time, such as, discipline, discomfort, individual attention, evaluation of learners' progress, teaching and learning process.

### 4.3.3 Teachers' training about ADHD

In the context of the DBE, training is a systematic process that is task-oriented because it focuses on the work performed in an educational setting based job or task descriptions. Training, therefore, aims to improve teachers' skills, for example, in the area of teaching learners perceived to have ADHD. Classroom management therefore becomes paramount, especially with such learners and as part of the teachers' treatment regime (Schultz, Storer, Watabe, Sadler & Evans, 2011). It is imperative for grade 3 teachers to be trained on what ADHD looks like. Participant 3 said:

*I remember four to five years back, there was a few hours workshop on ADHD during the June school holidays. That was the only workshop I ever attended and there was no follow-up to train the teachers on ADHD.*

Training of teachers about ADHD on a constant basis is very vital. Lack of teachers' training contributes to low levels of ADHD knowledge, which may contribute to teachers having to deal negatively with learners perceived to have ADHD in terms of their attitudes. While there is a profound lack of epidemiology data concerning ADHD for teachers' training about ADHD within the four participating Soweto schools, besides the participating teachers' responses on their training, there is no reason to doubt that there is a high rate of untrained teachers within the participating schools four districts in Gauteng. Therefore, there is a need for teachers of the four schools to be trained about ADHD as a condition so that they are better equipped to deal with learners perceived to have ADHD in their classrooms. Participant 6 agreed and said:

*Yes, my colleague is telling the truth about that workshop on ADHD. Since then, there was never another workshop on ADHD to promote teachers' development on this sickness.*

However, participant 9 differed saying she learned about ADHD at university. She reported as follows:

*I heard about ADHD and other disorders during my university studies when I studied psychology but could not study further because I did not have registration fees and I lost hope.*

According to Aguiar, Kieling, Costa, Chardosin and Almeida (2014), in-service training or education concerning ADHD as a way of developing teachers has been found to significantly improve teachers' knowledge, attitudes and classroom management skills among teachers, especially those teaching learners perceived to have ADHD. Therefore, in the interest of this study, it is important that teachers be trained about disorders such as ADHD to improve their classroom practices with learners depicting symptoms of ADHD.

Participants indicated that they had not been trained about ADHD and did not know how to treat learners depicting symptoms of this disorder. However, most of them indicated that there was light in terms of what teaching certain learners entailed since taking part in the research. Participant 15 indicated as follows:

*During my teacher training at the college, I was only trained on how to teach subjects to learners, nothing about challenges I was to face in the classroom, especially with such learners when I start to teach them and about learners suspected to have ADHD.*

It is the responsibility of school management, districts and the provincial DBE to complete their developmental training puzzle for teachers on ADHD and other various disorders as a developmental management plan for the teaching force.

Training of teachers about ADHD and identification of ADHD suspected learners is important since teachers are often the first persons to make a referral for assessments for ADHD suspects. Training of teachers on ADHD should be continuous as teachers need to be knowledgeable not only about the aetiology, diagnoses and prognosis of this disorder, but also on how to manage learners perceived to have ADHD in classrooms to effect positive educational outcomes for such learners. Furthermore, continuous training about ADHD and its co-morbidities would ensure that teachers are exposed to problem-solving situations which may vary and differ for individual learners, especially those perceived to have ADHD.

This continuous training of teachers might also provide new approaches of managing learners perceived to have ADHD in the classrooms.

#### **4.3.4 Dealing with learners depicting ADHD symptoms**

According to scholars like Barkley, (2016), Cackowski, Krause-Utz, Van Eijk, Klohr, Daffner, Sobanski, and Ende (2017); DuPaul, DuPaul, Chronis-Tuscano, Danielson, and Visser (2018), writing on ADHD indicate that many children with ADHD depict symptoms of the disorder before they even reach school age. In classrooms, particularly at that developmental stage, they have trouble meeting classrooms expectations for kids within their age group and grade. According to Evans, Owen, Mautone, DuPaul, and Power (2014), learners who struggle to sit still, who do not finish classroom task or homework, who sometimes seems to be daydreaming when the teachers are giving instructions, manifest symptoms of ADHD. Teachers usually complain about them as having behavioural problems. It is in such instances when parents are constantly called to meetings to what the teachers call “problem children”. Participant 8 responded by saying:

*I think such learners' behaviours in classrooms must be according to class rules. They need to be clear what I expect from them. They need to know this is how they should conduct themselves in class. What they must do, if they have to arrive at this time, then immediately when the bell rings they come to class. If they are given work to do, they do not have to play. They do their work, if they are struggling, they should call the teacher and tell the teacher what they are struggling with. When I force myself to walk around if there is walking space, they do not hide their work to be seen, they need to focus in class for them to be promoted and also understand.*

Participants indicated they were not trained about conditions such as ADHD at their respective colleges during their teachers training. Therefore, teachers are unable to handle such challenging learners' behavioural situations. This view is affirmed by participants in the way they treat learners perceived to have ADHD. One such intervention strategy suggested by most was that of letting learners perceive to have ADHD be brought to the front when in class to face other peers. However, teachers are not aware that in so doing, they might actually be putting emotional pressure on

those learners perceive to have ADHD and creating an area of defiance within learners who are perceived to have ADHD and depicting symptoms thereof. Participant 13 reported as follows:

*These are learners who are forever busy with classroom issues that have nothing to do with their grade curriculum. They jump up and down in class most of the times hurting themselves, talk excessively causing unnecessary noise, disturb other busy learners and every time asking to go to the toilet. Other learners complain about them having taken something without asking for it, such as a pencil, rubbers, books, and other learning materials.*

Behaviours associated with ADHD such as inattention, impulsivity and hyperactivity are noticeable in classrooms, as classroom settings require learners to behave in ways that are at odd with the symptoms of ADHD. Learners perceived to have ADHD are known (Kern, Amod, Seabi & Voster, 2015; Barkley, 2015; Barkley & Peters, 2012; Sadock, Sadock, & Ruiz, 2015; Thomas, Sanders, Doust, Bellier, & Glasziou, 2015) to experience persistent behavioural problems and academic difficulties that adversely affect their performance. Therefore, teachers have to deal with disruptive behaviours of such learners.

Teachers dealing with learners depicting symptoms of ADHD in their classroom and whose behaviours are unbecoming need to have behaviour management strategies in place. The goal of behaviour management strategies is to assist learners depicting symptoms of ADHD to manage their own behaviour. Behaviour management strategies will be dealt with in the next chapter under recommendations.

Dealing with learners depicting symptoms of ADHD and addressing the educational needs of such learners seem to be a complex matter and requires teachers to assess not only the learners' unique needs, but also the demand of the classroom environment. Prevention strategies that address classroom environment variable when dealing with such learners should always be the first considerations when designing interventions strategies. More successful interventions are a combination of classroom support and strategies taught directly to such learners to assist them

to become more academically, socially and behaviourally successful (Centre for Disease Control and Prevention, 2015).

In response to the question on how participants dealt with learners depicting symptoms of the disorder as a classroom intervention strategy, participants indicated that they would employ different interventions. However, participant 5 said that she has never heard about classroom intervention used for learners with ADHD or those perceived to have the disorder.

Participant 3 mentioned that there are learners she likes to keep close to her because they are disruptive. Participant 3 said:

*By keeping such learners close to me, I can always see what is going on and can make sure that they are not close to the door or windows, so that they will not be looking outside as they are easily distracted. Their work must be designed in such a way that their attention span is considered. If you give such learners an activity, the learners' activity must not be too long or too complicated. I make sure that the strength and weaknesses of such learners are considered. Lessons and assessments must be designed according to the learners' pace and abilities. Make sure they are kept busy with a variety of interesting activities.*

When dealing with such learners, participant 11 said:

*Firstly, you need to calm them down with songs, do actions to connect them, afterwards, instead of giving them longer activities, break the activities to be more interesting because some of them are intelligent. So, make the activities fun, sort of games and if the other one is not interesting or boring, then make it short and break it down, then look at the progress. Give incentives and move on to the same activity breaking it down into parts. I think in that way, they will finish writing and the stronger ones who finish first will go and give the other group pencils and collect all the scissors, they work as a collective enjoying the moment.*

Participant 8 cited a different intervention strategy saying:

*I isolate them by keeping them away from other learners because at times you have to be harsh, not as harsh as corporal punishment, but punish the learner just to be alone and make the learner feel if they are going to be happy alone or not. Remember as children, they have to play and cannot play alone. They have to play with other children. You have to make a follow-up why the learner behaves in that way and would call the parents. But most of the time I would consult the grade 2 teacher to find out how the learner was in the previous grade and how the learner was doing or behaving.*

Participant 16 further said:

*When we are busy in class, for example, I notice the learner is lacking somewhere and somehow, I lower the grade's work, like spellings. I will reduce the words to five and will weigh them on their improvement.*

Participant 16 also elaborated as follows:

*You first have to identify the problem in class, from there visit the family to experience the learner's home background first-hand, then structure the intervention plan from there.*

Participant 4 explained that for intervention to be successful when dealing with such learners in a classroom and school settings as follows:

*It depends on a particular learner because they are not the same. I will not apply all the intervention strategies to one learner. I will calm them down, by taking them to a quiet corner not far from the other learners where they will be able to do their work or finish work without any disruption. The purpose is not to make them do anything, but to put them alongside my table to monitor them until they finish the work, because sometimes others will say put him or her in the corner and the learner would not finish. So, make sure you separate them from the group and put them alongside the teacher's table, it does not matter, as long as the learner can be able to finish the work and I continue to monitor the learner.*



Participant 14 indicated as follows:

*When doing activities outside of the classroom, for example, at the playgrounds, I will have to keep an eye on such learners as they tend to be too excited, hyper and rush into doing things that are not required at that time. When monitoring such learners, I would give them leading roles to do and ask them to report back to me. In so doing, they are forced to focus on the task at hand because they know they have to report back to the teacher. When they report back, give them a positive response and immediately give them another task to do.*

Participant 18 reported as follows:

*Any interaction with such learners outside of the classroom needs the teacher to be very alert of learners that seem to have this disorder. Put such learner in groups of focused learners with leadership skills so that those with such skills will be able to control the group. Anything that would go wrong, the leaders should inform the teacher and then the problem learner will be called to order. At times keep such learners close to you and ask them to help you spot the ones not following instructions during activities because such learners enjoy being on the spotlight.*

According to participant 13, it is much better to use a language a learner understands to calm them down. The participant mentioned she would tell the learners that she *“cared and loved them, and in a way that makes such learners to feel at ease”*, as most of them seem not to be shown love and given care from their respective homes. The participant indicated she would tell the learners that *“the world needs you, and in that way the learners become relaxed and willing to learn”*.

Participant 1 said she would involve the learners' parents after failed attempts to address the undesired behaviour. She reported as follows:

*I will call the learners and tell them to stand in front of the class, they become shy and will keep quiet, but if the conduct continues, I will call their parents to discuss the matter with the parents.*

While other participants indicated that when dealing with such learners who were showing symptoms of the disorder, they would give the learners more classroom responsibilities, participant 12 said:

*In class I make them group leaders ... I make them take responsibility of the class at some point, that makes them feel responsible. I give them the attention they need but will go on monitoring them all the time, because if you do not monitor them continuously, that leadership role might get to their heads.*

Participant 2 also shared a responsibility intervention by saying that,

*In class if such a learner finishes early, I will ask the learner to help other learners do the work correctly and at the sports ground, I will appoint the learner as a leader of a group and at assembly, I will ask such a learner to participate in reading, singing or something that will satisfy such learners' attention.*

Participant 17 was more cautious in the application of the intervention. She stated that if they are outside usually running at the sports ground, she would tell the suspected learners that they are no longer allowed to do the running because they are misbehaving and should come stand next to her, then they must look at other learners running. Participant 1 responded by saying:

*In terms of being in the classroom, I always send such learners to give other learners books, collect pencils, distribute or collect something. I think it is very important to always give such learners something to do to keep them busy in that way you reduce their energy levels.*

There seems to be a mixed bag of intervention strategies from the participants' various utterances on how they deal with learners perceived to have ADHD.

Participants in this study seem to focus only on the behavioural interventions of their learners.

It is, however, very clear that the current sample of participants' responses demonstrated their knowledge levels, attitudes about ADHD and towards learners perceived to have this disorder. It does seem that participants' lack of proper classroom-based intervention strategies and ADHD associated behaviours when dealing with learners perceived to have ADHD was also demonstrated. Participants' responses varied significantly from those few who seemed to have ideas as compared to most of those who demonstrated extreme lack of knowledge about ADHD and their attitudes towards ADHD as indicated in their responses.

Participants demonstrated their responses in part C of the Scale for ADHD-specific attitudes (SASA), participants feedbacks were haphazard. In other words, most of them were just using the terminology that was already within the questionnaire to respond to the open-ended questions. Intervening when dealing with learners depicting symptoms of ADHD is vital to ensure that the behaviour intervention plan is based on a careful functional assessment behaviour. The goal of behaviour management strategies is to assist such learners learn to manage their own behaviour. Teachers should be aware the brainpower is there, but such learners just cannot seem to focus on the material they are working hard to deliver and their behaviours take time away from lesson instructions and disrupt the whole classroom.

#### **4.3.5 Teachers' limited knowledge about ADHD**

Generally, studies in this field in Iran and other countries have shown a significant lack of desirable knowledge of ADHD and learners with ADHD by teachers (Jimoh, 2014; Blotnicky-Galla, Martin, McGonnell, & Corkum 2015; Salamatbakhsh, Khademi, Noordbakhsh, Rajeziesfahani, Davari-Ashtiani & Razjouyan, 2016). However, in the context of this study, participants demonstrated limited knowledge about ADHD, though this was not an aspect of the study but was brought up during data collection. Most participants mention symptoms they personally experienced in classrooms but could not link them to the disorder under study.

Participant 9 indicated that teachers' limited knowledge about this condition affected their teaching, such as being unable to teach learners suspected of having ADHD, therefore, causing deficiencies and loopholes in the teaching and learning environment. Participant 9 had a personal experience of this disorder in that she had a learner who was diagnosed with ADHD in her classroom and the parents disclosed that confidential information to her and she had to monitor the learner to take medication at required times at school. In elaborating further, participant 9 said:

*I think it affects the behaviour and academic performance of a learner. I have heard about it and had a learner diagnosed with ADHD in my class because the parents disclosed it to me. They requested me to observe him when he drinks the pill at 11am. Every time when they took him to the hospital, there would be reports that I had to give and fill forms in as the class teacher.*

Participant 13 indicated that at some point she studied psychology but could not complete the studies owing to financial issues. That is why participant 13 responses have been forthright in relation to most questions put to her. The participant expressed one's insight about ADHD by explaining as to what ADHD is and how to deal with learners perceived to have ADHD. Participant 13 said:

*ADHD is a condition that requires a lot of patience because we are dealing with children and of course even adults have it. We are dealing with learners who are not doing things intentionally due to behaviour that is intrinsic. They cannot help it and maybe these learners are irritating you, they do not have to be harassed or shouted at, because this is just a condition. They cannot help it and it is the way they are and sometimes you find that these learners do unacceptable things. It is a condition like any other condition that needs people to understand and I think it is neurological.*

Like most participants, participant 2 managed to give insight of the disorder by articulating to several symptoms being observed in the classroom. Participant 2 said:

*Those are learners who are hyperactive and just cannot follow instructions given by the classroom teachers. If you instruct them to sit down, they would stand up, if you say they must stand up, they would sit down. They literally do the opposite of what teachers instruct them to do.*

In addition, participant 2 described such learners as “*learners who have lots of energy, they are loud and their presence can be felt. They are very active and are always on the run*”. She further, explained that these learners, *write what they want, say what they want and do not have boundaries.*

Participant 2 said as teachers, owing to not been trained about the disorder, they lack skills on how to deal with learners depicting symptoms of ADHD in their classrooms, went on to say at times teachers felt bad when they notice that the learners are to be retained in the grade they are in. Participant 17 did not fully understand the disorder but mentioned some symptoms thereof and alluded to the following explanation as intervention when dealing with such learners:

*We do have such learners; you will forever tell them to sit still and one would push other learners and can see this learner is tired, has sleepy eyes and wants to sleep, but because I am a teacher, I have to prove that there is a teacher in class. Then I will force that learner to write and I see this learner does not want to write, there is one or two jumping up and down and always ask myself, what is the cause of this? but do not understand.*

Participant 1 indicated that she slightly heard about ADHD in her curriculum studies at a higher institution of learning. This was not surprising when she gave an elaborated but brief explanation of the symptoms of ADHD. She expressed that as an intervention this is how she employed it:

*I do not quite understand or am I sure about this disorder, but I think it has to do with learners who have certain disability and need to be guided all the time and at the end, they understand and learn.*

Though most participants did not have full understanding of what ADHD is, they were at least able to mention some of the symptoms depicted by learners perceived

to have ADHD. While there is a profound lack of empirical studies concerning ADHD within the four schools, there is no reason to presume that ADHD prevalence rates are lower in Soweto mainstream primary schools as compared to other schools within the province. Participant 5 said:

*Well from what I have heard, this is a learner who cannot sit still, who is agitated and busy because we usually think these learners are naughty not knowing that it is a condition and do not understand that the learner cannot help themselves.*

Participant 14 alluded to the following:

*These are learners who are inattentive, meaning they cannot pay attention for a long time on the same thing and are disruptive, impulsive and always have something bad to do, but even though they are normal, they cannot just sit still.*

Responding to the question, participant 3 said:

*I understand they are hyper, they do not focus much, lose things and become easily distracted by anything. If you do not keep to your routine, they lose out and it becomes a challenge to get them back on track. They need routine and follow-up. I understand that this ADHD is a condition that affects our learners' behaviour, they become hyper and unstable.*

From that point participant 18 in response elaborated as follows:

*I think it is a condition whereby a learner is extremely active, resilient or forever fidgeting with their hands and their concentration span is very short. It is a disorder which makes a learner not to want to sit down, always moving around busy and not concentrating. When the learner sees people passing by, he or she will wave to greet and concentrate on that person and his or her mind will be on that person.*

South Africa as a developing country with a significant number of primary school teachers, appears to have limited knowledge about ADHD. This equates to the findings from previous studies in the city of Lagos, Nigeria, which found that teachers have very limited knowledge about ADHD (Jimoh, 2014). As such, within recent years, there has been an increasing emphasis on teachers having to gain knowledge about ADHD and understanding learners with ADHD (Nur, & Kavakc, 2010).

#### **4.3.6 Teachers' attitudes towards learners perceived to have ADHD**

Teachers having positive attitude certainly provide a positive learning environment where such learners can follow challenging behaviour with reasonable outlook and put more efforts to attain their learning goals. Teachers with positive attitude towards learners perceived to have ADHD can plan instructional variety, task-based, criterion-based environment and also make such learners engage actively in the learning process.

According to Youssef, Hutchinson and Youssef (2015), research findings suggest that higher education levels of teachers may be positively influential towards teachers' attitudes of these types of disorders. While it is the responsibility of the national DBE in re-skilling and up-skilling teachers by training its teaching force about these kinds of disorders, the training of teachers about such disorders would be of advantage for teachers as they would enter the field of teaching armed with resources and tools to face the unexpected challenges from learners perceived to have ADHD and its co-morbidities. A once-off few hours workshop on ADHD and other disorders does not serve a developmental purpose for teachers, especially teachers who must deal with such learners daily and at that developmental stage of such learners.

During the process of the research, the researcher noted that most participants were female teachers. Most indicated they have been teaching for over ten years, specifically within the foundation phase, grade 3 being part thereof and have taught almost all the grades in the foundation phase. They expressed their views that it was common practice to find teachers in this phase to be females. Therefore, it was not surprising to come across such type of observations, as female teachers are regarded to be more compassionate as "mothers" with motherly love over and above that they are teachers and when dealing with learners as young as the grade 3 learners, especially at that developmental stage of such learners.

Some participants expressed negative attitude towards learners perceived to have ADHD. Participants felt that such learners should be taught by specialist teachers. This view is clearly demonstrated by most of the participants in responding to part D of the open-ended question from the questionnaire. Participant 10 said:

*Most of the time such learners really test your patience and if you do not have patience, you might find yourself having said or done something that will get you into trouble with the school and the district authorities. These are learners who may make you have a negative attitude towards them as well as teaching.*

Participant 13 further explained the following:



*They needed to be more motherly to such learners, though these learners will annoy you, as teachers we need to stay calm and collected because if we allow ourselves to be reactive we might find ourselves having done something that will have us in school bad books since corporal punishment has been abolished. There is so much to be done in a class and such learners will make you have a negative attitude towards them as well as teaching. So, one needs to be in control of one's attitude, emotions and anger.*

Participant 1 said:

*If you are not strong on the inside, that might make you to have a negative attitude towards these young learners and you might end up making serious mistakes and will be charged for misconduct.*

Participants lamented that negative attitude towards these learners is caused by the fact that there is no support for teachers on how to deal with such learners. Participant 9 reflected as follows:

*As teachers we have a duty to groom and nurture these learners so that as they go on in their studies, other teachers will not have to face challenges that we experienced during the early school days of these learners. School management and district officials will never spend half a day, never mind a full day with the grade 3 teachers to see first-hand what the grade 3 teachers are going through. But commit one mistake not intentionally, you will be called to the school office to be charged for misconduct and the matter will be escalated to district level. I am not too sure of my attitude towards such learners. Honestly speaking, their behaviour makes me have a negative attitude towards them, though I will not show it because I think they act in a disrespectful manner most of the time.*

This is confirmed by the following comment illustrated by participant 18 with reference to one's attitudes towards learners perceived to have ADHD:

*I truly find it frustrating to deal with such learners. My attitude keeps coming out because of these learners. They take too much of my teaching time*

*because every time I have to call them to behave, do their work, ask them to stop disturbing other learners and so on. If you do not act accordingly, punishing such learners, you are actually sending a wrong disciplinary message to other learners. I do not know what other learners would think of me as a teacher. Maybe they think I am afraid of the troublesome learners because such learners also look big and over age for a grade 3 class. Even when you submit a report about such learners' conduct or behaviour to authorities, most of the times we are told that there are not enough facilities for such learners, meaning special schools. Teachers, especially at grade 3 level are really faced with challenging classroom problems. The parents or guardians are the last to show concern even when you call them, they never come.*

Participant 4 was upfront and did not hide her negative attitude towards learners depicting symptoms of ADHD. However, that is clearly an indicator that attitude is of knowing that the teacher has no knowledge of the disorder and how to intervene because of not receiving training about ADHD. Participant 4 narrated as follows:

*I must honestly say that I just cannot stand the behaviour of learners with that type of sickness. It really affects my personal attitude. The fact that I have no clue as to what it is and was never trained about it even at teacher training college.*

A study by Jimoh (2014) conducted in Nigeria regarding knowledge and attitudes of teachers in Lagos, found that most teachers had limited knowledge of and attitude towards ADHD. Most participants showed lack of knowledge about ADHD. Although knowledge about ADHD was not the purpose of this study but contributes to the teachers' attitudes towards learners perceived to have the disorder in their classrooms. Similarly, research by Blotnicky-Gallant, Martin, McGonnell, and Corkum (2015) on teachers' attitudes reported an above average regarding ADHD among teachers in Canada and Iran, as opposed to desirable in Vienna Austria.

This study explored grade 3 teachers' experiences with learners perceived to have ADHD and whether with their experience they employed any intervention strategies in teaching these learners. As an intervention, it seems participants resorted to

either overloading the learners or using extra work to ignore or perhaps punish the learners. Participant 7 indicated she prefers to give such learners more classwork to try and keep them busy in class. She commented as follows:

*I will give these learners more work such as distributing and collecting books to and from other learners in class, clearing the teacher's table, collecting chalk, help other learners and any other class work that will keep such a learner busy.*

Participant 11 mentioned she would make such learners to come sit in the front rows next to the teacher's desk so that the class teacher could have a closer look of the learners' conduct. Participant 11 indicated as follows:

*If these learners continue being disruptive, I will call such learners to come to the front next to my desk, ask them to sit and work from the front so that I have a clear sight at them and monitor their movements and activities very closely.*

Participant 4 indicated that owing to lack of knowledge about this disorder contributed to her attitude, she would speak to a colleague to help out in the management and transfer of the suspected learners to another classroom as she did not know just how to manage those learners. Participant 4 reported as follows:

*I would ask one of my colleagues from any of the other grade 3 classes for help to temporarily have such learners transferred to their classes since I am unable to manage the learners' classroom unbecoming conduct or behaviour that is disrupting the flow of teaching and learning in my class.*

Participant 17 mentioned that she would bring such serious matters up during their grade 3 or phase meetings. The participant said the reason for raising such an issue during those meetings was to seek for help and advice from colleagues. Participant 17 said:

*Since I am on chronic medication, I know my temper and attitude. To avoid causing troubles with such learners, during our grade or phase meetings, I*

*would bring that issue up so that colleagues especially the Head of Department may come up with some solutions on how to deal with such learners. I would suggest that we swop such learners temporarily from one class to the other. Maybe certain colleagues may have an idea on how they can handle such learners' behaviours and conduct.*

Participants' responses with reference to their attitudes when dealing with learners perceived to have ADHD indicated specific aspects of the participants' attitudes, such as their beliefs, evaluations, emotions, and behavioural responses towards such learners. For example, during group discussions and interviews, some participants showed more helpful and positive behaviour towards such learners and held more favourable beliefs about interventions than the less informed ones about ADHD.

It is the responsibility of the DBE to address gaps by re-skilling and up-skilling the teaching force. The DBE must take a proactive approach by designing and conducting specialised in-service training courses for primary school teachers in collaboration with institutions of higher education to increase recognition and encouragement of such a force. Failure to do so, teachers sooner or later will feel burned out owing to the stress and frustrations that they constantly experience when dealing with learners perceived to have ADHD.

#### **4.3.7 Stereotyping of ADHD**

Combating deep-rooted stereotypes is no light task. Education is intended to be a great equaliser – one that provides everyone with the resources and capabilities they might need to be successful. There is plenty of evidence suggesting that it may not be as equalising as many would like it to be. There are still academic achievement gaps, for example, between learners that are perceived to have ADHD and those without the disorder (Miyake, Kost-Smith, Finkelstein, Pollock, Cohen & Ito, 2010).

According to Masuch, Bea, Alm, Deibler and Sobanski (2018), stereotyping owing to having ADHD by teachers can have devastating consequences. Masuch, et al. (2018) maintain that despite much publicity over the last two decades, ADHD is still

a common disorder that is widely misunderstood and further indicate that there are many negative and hurtful stereotypes associated with ADHD. Some of these stereotypes include people with ADHD are not smart; someone diagnosed with ADHD is also a violent person; ADHD only occurs in children not properly parented, naughty children who cannot think and are uncontrollable.

Despite evidence to the contrary with regards to what some teachers think about learners perceived to have ADHD, Sherman (2019) indicates that most people still do not believe that ADHD is a bona fide medical condition. For example, teachers in this instance see it as an excuse for sloppiness or laziness to do work, particularly as it affects learners perceived to have the disorder. By simply telling learners perceived to have ADHD that they could do better on a particular numeracy test results in worse performance, phenomenon referred to as “stereotype threat”. The fact that ADHD symptoms appear to come and go, depending on the situation, only feeds the doubters’ contempt. They say, or think, things like, “Why can’t you pull it together”? You are fine without moving around aimlessly in class, why are you not able to focus? And how come you cannot sit down and do your classwork?”

Masuch, et al. (2018) concur that none of these stereotypes are entirely true, as every ADHD sufferer is different and some are very gentle, which goes against these stereotypes. It was however, demonstrated during data collection processes that some grade 3 teachers stigmatised certain learners perceived to have ADHD based on the learners’ behaviours in classroom settings. Participant 8 concurs as follows:

*It appears that boys are usually more aggressive, naughty, more verbal and more likely not to conform to classroom routine than their girl class mates. The boy-child has often been labelled as being physically more active than his girl peers. These behaviours are partially blamed on the boys in class and school premises, being more immature than the girls. Boys often appear to be intellectually challenged in comparison to the girls from the circumstances regarding factors such as age, gender, and socio-economic circumstances.*

Participant 3 said:

*Boys mature and progress at different levels than the girls. They therefore behave very differently. Unfortunately, boys are then often labelled because they struggle to sit still, are too energetic and cannot do classwork independently.*

This stereotyping has a bearing on how teachers treat boy learners. Participant 15 said:

*Boys generally have a very robust type of personality, come across as busy, energetic and lively. This is one of the symptoms I think is associated with this ADHD. Unfortunately, it is one of the criteria used when we label them. Boys are picked as naughty and troublemakers than girls.*

Participant 19 alluded to the teachers' gender bias and victimisation of boys as compared to girls. According to participant 19, "boys compared to girls are often judged differently and are more on the receiving end of the teachers than girls." Furthermore, the gender of a teacher according to one participant might contribute to stereotyping of such learners. Participant 19 explained further as follows:

*Remember that grade 3 teachers are females. So, I think there is a lot of biases against the boys. Gender bias is a real phenomenon in our society, as female teachers we carry it up to our classroom. Stereotype mind-sets are characteristics of our cultural backgrounds. Often boys are expected to be tough and resilient, they do not enjoy the same sympathy as girls with frail personalities. Remember we talking about very young children.*

It is not surprising that teachers are more focused on the boys' behaviours as compared to girls. Most scholars in the field of ADHD, like Aguir, Kieling, Costa, Chardosin and Almeida (2014) and Barkley (2015), indicate that boys are more energetic and showing out (hyperactive) than girls, who are more reserved. However, most participants in this study mistakenly believed that ADHD is a boys' disorder and rarely affects girls.

In response, participant 2 voiced out that teachers were too bias towards boys than girls, one is not certain about the reasons for such biases:

*Some teachers are certainly very bias, they stigmatise or label most of the boys who are said to be troublesome and have them punished. Girls are often well mannered and looks like they behave better than boys and as such, teachers tend to judge girls less harshly than boys. So hyperactive boys are always on the receiving end from their teachers. Girls' behaviours seem to be more relaxing and quiet, they are able to focus and concentrate better than most boys. Teachers have a perception that girls behave better than boys.*

Participant 7 made the following input:

*Girls are by their nature able to control themselves and their impulses better. They just do not demonstrate it as clearly as the boys. Boys just show it out, show their behaviour out on the spot.*

In alleviating stereotyping towards learners perceived to have ADHD, it would benefit all education stakeholders if the DBE in collaboration with higher education institutions educate the teaching force about such kind of aspects. For the teachers, it would be beneficial to use constructive feedback as an effective tool when communicating high standard for performance in tandem with assurance that learners perceived to have ADHD can meet those high standards, rather than humiliating and stigmatising such learners. Feedback given in this way serve a good purpose for all learners, even those that are not perceived to have the disorder and are not susceptible to stereotyping threat, but it is particularly beneficial to stereotyped learners because it reduces the perceived bias that such learners may hold for their evaluation, increases their motivation and preserves learners' engagement in academics.

#### **4. 4 CONCLUSION**

Initially, 24 participants from four different Soweto mainstream primary schools committed to participate in the in-depth interviews, FGDs and the use of an ADHD-specific knowledge and attitudes of teachers (ASKAT) questionnaire of this study. They all signed consent and confidentiality forms but five participants withdrew and

19 participants took part with the focus on teachers' experiences of learners' perceived to have ADHD, interventions employed (if any) in their teaching practices as well as their ADHD knowledge and attitudes, though these were not the focus of the study. Subsequently, analysis and interpretation of data were presented. Data collected were classified into patterns, categories and into themes. Themes that emerged from the analysis are poor time management, overcrowded classrooms, teachers' training and awareness of ADHD, interacting with learners depicting symptoms of ADHD, teachers' limited knowledge about ADHD, teachers' attitudes towards learners perceived to have ADHD, and stereotyping of ADHD. The next chapter will draw discussions of the findings and conclusions, list limitations of the study, and make recommendations arising from the study.



## **CHAPTER FIVE: DISCUSSION OF RESULTS, LIMITATIONS OF THE STUDY AND RECOMMENDATIONS**

### **5.1 INTRODUCTION**

This study explored grade 3 teachers' experiences of learners perceived to have ADHD, with the aim of harvesting best practice intervention strategies employed in Soweto mainstream primary schools. The focus was on how grade 3 teachers deal with learners perceived to have ADHD and the types of intervention they employ during teaching practices. Teachers' knowledge about ADHD, their attitudes towards ADHD and learners perceived to have the disorder are discussed as these aspects were brought up by participants during FGDs and interviews.

### **5.2 DISCUSSION OF RESULTS**

#### **5.2.1 Summary of main findings**

The outcomes from the analysis of this study found that all participants were aware of ADHD when they mentioned symptoms of the disorder they experienced with reference to the learners' behaviours but could not link the symptoms to ADHD. All the participants mentioned several learners' behaviours related to symptoms of ADHD. These include for example, late coming for lessons, always running around, lack of attention during teaching time, not sitting still, answering before the teacher completes the question, and many other ADHD related symptoms.

All participants mentioned various interventions they employed when dealing with what they referred to as learners with behavioural problems. In that regard, this study found that all participants faced several challenges on a daily basis which interrupted teaching and learning. Besides learners' behaviours, for example, they have too much curriculum content to prepare and deliver to learners and other school related co-curriculum activities, such as, sports activities, choir practices, learners' disciplinary issues, various meetings to deal with, for example, class, phase, school and teachers' union. They indicated that all those challenges made it impossible for them to concentrate on the subject content and give individual attention to learners especially those perceived to have ADHD. Therefore, such learners continually fall through the cracks.

It was envisaged by the researcher that participants' experiences when dealing with learners perceived to have ADHD seem to be a challenging phenomenon in Soweto mainstream primary schools that participated in this study. Most of the participants' views were that being in classrooms and dealing with such learners, in their personal experiences is a mammoth task and, in most instances, a nerve racking and frustrating one. Majority of participants reported that they did not understand why certain learners behaved the way they did and as teachers, they employed different interventions when dealing with such learners. They, however, lamented that they had not being trained on ADHD and how it presents itself in classroom situations despite them having being practicing teachers for more than 12 years of uninterrupted teaching experiences.

From most participants' responses, this study revealed that there seems to be lack of knowledge about this disorder and consequently, teachers' attitudes towards learners perceived to have ADHD seem to compromise interaction between teachers and such learners, particularly around stereotyping such learners. These become more pertinent when considering Muthukrishna's (2013) research findings in terms of the dynamics of learner-teacher interaction. According to Muthukrishna (2013), there is approximately ten percent (10%) prevalent rate of ADHD in South Africa, though it is not yet officially presented in the South African context. This implies that most grade 3 classrooms in Soweto mainstream primary schools where the research has been conducted are most likely to have one or more learners depicting symptoms of ADHD in the classrooms. The findings of this study indicate that lack of training teachers on neurodevelopmental disorders such as ADHD causes teachers' misunderstanding and misconceptions of the disorder as it presents itself in classrooms and inevitably, employ inappropriate intervention when dealing with such learners. Therefore, the study suggests that training of teachers about disorders such as ADHD is of critical importance.

The study further found that participants had received a once-off training on learners' behaviour which might have included ADHD and that it was not enough for the development of participants in terms of understanding the disorder. However, this study is of the view that lack of continuous teachers' training by the DBE, firstly around Inclusive Education, White Paper 6 (Department of Education, 2001) and

secondly about neurodevelopmental disorders such as ADHD, disadvantages teachers in knowing how to deal with learners perceived to have ADHD. Therefore, continuous training of teachers on ADHD, symptoms, types, causes, diagnosis and treatment are of paramount importance and may therefore, ease the teaching pressure teachers experience away when faced with learners perceived to have ADHD. This will not only be of benefit to the learners but also to the teachers because more information and understanding about ADHD by teachers will address the misunderstanding, misconceptions and other frustrations experienced by participants because of teaching learners perceived to have ADHD.

#### **5.2.1.1 Poor time management**

Several factors contributed to learners managing their time poorly, for example, procrastination, being unmotivated, rushing to complete certain tasks, poor sense of time, failing to set goals, not having clear goals, poor planning skills and so on. Most of the participants raised issues of learners' late coming for lessons which disrupted the flow of teaching and learning. According to participants' views, learners poor time management for lessons was a frustrating and disturbing daily experience. The participants further complained that as teachers, they have a challenge with their own time management because there was just too much of curriculum content to be covered within specific timeframes and more administrative work to be done for submission to education authorities by participants. Therefore, learners arriving late to class worsen the situation, resulting in them being impatient with the learners, especially those that are perceived to have ADHD as this transgression happens more often with learners.

Poor time management by learners perceived to have ADHD gave teachers limited teaching time with the learners, especially those perceived to have ADHD owing to the learners' late arrival to class for lessons. Participants further mentioned that they had to teach at a fast pace to make certain that they are in line with what they referred to as GPLS, which was launched by the GDE around 2011, as a programme that they had to follow in order to cover specific themes within certain allocated timeframes and revert to literacy teaching in the foundation phase, grade 3 being part there off. They mentioned that they moved fast to be able to move on to another curriculum content, irrespective of whether learners perceived to have

ADHD arriving late for lessons followed what was there for the taking or not. It therefore became apparent that teachers are more concerned with curriculum completion rather than the educational, social and behavioural development of such learners. The teaching pace referred to disadvantaged learners with learning challenges especially those perceived to have ADHD.

#### **5.2.1.2 Overcrowded classrooms**

There seem to be too many challenges confronting grade 3 teachers who took part in this study, for example, the issue of large classroom, administrative work to be done, teaching at a fast pace to accomplish curriculum expectations, shortage of resources, teaching and learning disruptions, unbearable classroom conditions and lack of teachers' development to list but a few.

Participants indicated that they had huge classroom enrolment of approximately 50 to 60 learners in their classrooms as opposed to 40 as regulated in the National Education Policy Act number 27 of 1996 on teacher-learner classroom ratio. As a result, they found it difficult to manage learners to the best of the teaching practice abilities and as such, do not even have time to go back to assist and support learners perceived to have ADHD, never mind identifying them for professional referral.

Most of the participants presumed that the inability to sit still in an overcrowded classroom was always exhibited by learners perceived to have ADHD. This may be linked to the learners being uncomfortable in the classroom setting owing to the overflowing learners' classroom enrolment.

According to a greater number of participants, they mentioned that coupled with there is also more administrative paperwork to be done to catch up with the schools' expectations in terms of teaching requirements. The administrative paperwork referred to, for example are, (a) marking of learners' classroom tasks and homework, (b), assisting individual learners especially those perceived to have ADHD, recording of learners' tasks outcomes and (c) marking of the daily attendance register of learners and other daily classroom requirements from teachers.

### **5.2.1.3 Teachers' training and awareness about ADHD**

Participants' responses proclaimed that there is lack of constant intensive training and awareness for participants about ADHD. The current sample of participants who took part in this study indicated that they had not received any continued and productive teacher development training workshop about ADHD or made awareness of this disorder. The study found that lack of teachers' development about conditions such as ADHD disadvantaged teachers in terms of understanding how to deal with learners perceived to have ADHD and other learners with various educational needs.

However, some participants mentioned that the training they attended was a once-off thing. They also mentioned that training of such critical areas found during the teaching practices should be an on-going thing for teachers' development. They indicated that there was a need for them to be knowledgeable, not only about the aetiology, diagnosis and prognosis of this disorder, but also on how to manage learners perceive to have ADHD in order to effect efficient and positive teaching outcomes (Alkahtani, 2013). This study suggests that the training of teachers about ADHD will put them at an advantage level and bring their frustrations, stress and unhappiness levels down.

A knowledgeable teacher is an asset to the community and the learners. This is so because the teaching profession has positioned teachers in a unique place to identify learners with symptoms of ADHD and refer identified learners for further expert assessment (Rama and van Rensburg, 2013). However, teachers in this study relied more on the teaching experience in an attempt to support learners. Despite this reliance on teachers for such identifications, this study supports Rama and van Rensburg's (2013) assertion that untrained teachers on ADHD can provide inaccurate and inappropriate advice to other service providers as well as to parents, therefore, placing such learners in danger of receiving inaccurate assessments and inappropriate interventions.

Participants reported that they spend long school hours with learners, inclusive of those perceived to have ADHD. Therefore, they felt that their interaction with such learners put them at an ideal position for early identification of such learners, thereby

enabling them to compare such learners during interaction with their age and grade appropriate classmates.

According to Moldavsky, Pass and Sayal (2014), teachers are the most common source of referral especially when dealing with learners depicting symptoms of ADHD. Owing to lack of training on what to do and how to deal with such learners, most participants indicated that they gave such learners leading roles, tasks and making them sit in front next to the teacher's desk. Conclusively, it is evident that lack of knowledge about ADHD is one of the participants' additional challenges that is a contributing factor when dealing with learners perceived to have the disorder. Many participants had extensive years of teaching grade 3's and had massive experiences of the subject methodology. However, this study found that most of the participants had low levels of knowledge about ADHD, negative attitude towards the disorder and learners perceived to have ADHD and lacked appropriate intervention to employ when dealing with such learners.

#### **5.2.1.4 Dealing with learners depicting ADHD symptoms**

Teachers are with the learners for most of their lives. A teacher spends close to five hours with a particular learner daily. Therefore, over time, teachers get to know learners and this can either be positive and negative. The challenge arises when the teachers are not equipped to deal with that, they perceive to be a "problem behaviour" that in most cases is translated to a "problem child" and therefore labelling that child. Teachers expressed that they would like to see all learners in their classrooms adhering to their classroom rules. However, this becomes challenging as there are learners who struggle to do this. Teachers see this as disrespectful and will want to punish these learners. This is a result that they do not have much training about the ADHD symptoms and how to address them.

Some teachers indicated that they can identify the symptoms and now employ different teaching styles, attention and strategies to different learners. For instance, learners who were easily distracted are seated away from the windows and other possible distracting stimuli. The other is giving the energetic ones more work to do. However, there appeared to be a lack of engagement with the learner's parents.

Therefore, parents are not fully aware of their children's behaviour in school and that this condition has serious implication to their learning.

Teachers dealing with learners depicting symptoms of ADHD in their classroom and whose behaviours are unbecoming need to have behaviour management strategies in place. The goal of behaviour management strategies is to assist learners depicting symptoms of ADHD to manage their own behaviour. Behaviour management strategies will be dealt with in the next chapter under recommendations.

#### **5.2.1.5 Teachers' limited knowledge about ADHD**

The researcher administered ADHD-specific knowledge and attitude of teachers (ASKAT) in a form of a questionnaire at the four Soweto mainstream primary schools where the research was conducted to determine participants' knowledge and attitudes about ADHD. The questionnaire was divided into four parts, namely, part A dealt with demographic questions and had 11 items, part B, was a scale for ADHD-specific knowledge (SASK) with 20 items, part C addressed scale for ADHD-specific attitudes (SASA), had seven items and part D was an open-ended question with five items (Mulholland, Cumming, & Jung, 2015).

To establish what participants' experiences were when faced with learners perceived to have ADHD, the researcher focused on part D of ASKAT as it relates to the study. Findings from part D revealed that most of the participants could not describe learners displaying hyperactive and inattentive behaviours, had no clue about ADHD and its associated behaviours, they raised different opinions with regards classroom intervention used with learners exhibiting ADHD associated behaviours and employed various strategies when dealing with learners perceived to have ADHD. In part B, participants' responses revealed that most participants' knowledge levels are very low. It was however not surprising that most participants were at least able to mention some symptoms related to ADHD, but not linking the symptoms to ADHD.

Participants' knowledge towards ADHD became another objective in this study as it was brought up by participants during FGDs and interviews. Conclusively, outcomes

from scale for ADHD-specific knowledge (SASK) questionnaire found that overall knowledge about ADHD among most participants was very low, owing to lack of training, information and awareness about ADHD. This is not surprising when considering that the prevalence rate of ADHD in South Africa is around 5-6 percentages which is, similar to worldwide prevalence (Youssef, Hutchinson, & Youssef, 2015). However, Muthukrishma, (2013) argues that the prevalence rate of ADHD is not yet officially presented in the South African context. Therefore, in that context, it is of importance that participants must be fully trained, educated and well prepared to deal with learners perceived to have ADHD.

According to Aguiar, Kieling, Costa, et al. (2014) and Youssef, Hutchinson and Youssef, (2015), the educational levels of teachers may be influential in that regard. They mention that teachers with a master's level education had a better understanding of positive attitudes towards what ADHD is, as compared to those with lower educational levels. This could be the case with the outcomes of this study, as all participants in this study had lower than a master's education levels to understand what this disorder is and how it affected such learners in classroom settings. The study found that participants in this study only had an education diploma. However, very few participants had improved their educational levels post diplomas in education.

In soliciting more information about teachers' knowledge from participants, this study explored two major types of teachers' knowledge about ADHD, namely, the perceived and the actual knowledge. This study found that the perceived knowledge as demonstrated during FGDs and interviews by the participants, was higher than the actual knowledge with regard to the participants' responses. This, however, indicated that there is a substantial knowledge gap about ADHD and the types of intervention strategies in Soweto mainstream primary schools' where this study was conducted.

This study reveals that most of the participants reported that they were uncertain whether existing policies around proper action to be taken when suspecting specific learners who exhibited ADHD existed. This study found that most of the participants chose to inform parents should they suspect certain learners to be symptomatic of ADHD. Correspondingly, Visser, Danielson, Bitsko, Holbrook and Kogan (2014)



assert that one of the main approaches to be used by teachers is communicating with the parents of the suspected learners is to advise parents that their children undergo evaluation by trained professionals, which is the case in terms of how participants communicate the information of suspected learners to the parents.

#### **5.2.1.6 Teachers' attitude towards learners perceived to have ADHD**

During the administration of ADHD-specific knowledge and attitudes of teachers (ASKAT), in particular, the section on scale for ADHD-specific attitudes (SASA), there was no indication that all of the participants had any negative attitudes towards the disorder and learners perceived to have the disorder since the majority of participants were not even aware of the disorder up until during the process of the research. It was, however, not surprising from the findings that very few of the participants showed a negative attitude towards learners perceived to have ADHD due to the learners' behaviours. This was demonstrated by some of the participants use of words such as "naughty child, annoyance and frustrating" in their responses referring to them dealing with learners perceived to have ADHD who were not following routine or whose behaviours were unbecoming and causing mishaps within classroom setting.

Teachers with a better knowledge levels of ADHD are more likely to have a positive attitude towards learners perceived to have ADHD than those with poor or not knowledgeable. It is, however, possible that teachers with most years of teaching experience gained valuable awareness of the problems faced by learners perceived to have ADHD and makes all attempts to assist such learners.

All participants generally viewed ADHD as a serious condition that has potential to derail learner educational gain. This is reflected by their responses in which they mentioned that learners perceived to have ADHD are "naughty, lazy and stressing" to deal with and therefore, disrupted the process of teaching and learning. However, some participants felt that such disruptive learners would be best taught by specialist education teachers. This view of such learners having to be taught by specialist education teachers, is however, in contrast to the DBE's introduction of inclusive education within the education sector in this country. The study found that learners perceived to have ADHD seem to take up too much of teachers' time, are

often distracting teaching and learning as well as the concentration of other learners and cause multiple disruptions in any classroom setting. It is, therefore, not surprising from the outcomes of this study that participants with poor knowledge of ADHD, might become increasingly negative over time when teaching such learners, as is the case with some of the participants in this study.

#### **5.2.1.7 Stereotyping of ADHD**

The common criterion to identify learners, according to teachers is through the stereotype of “naughty, lazy and uncontrollable learners” seem to prevail among most teachers in Soweto mainstream primary schools as indicated by participants. However, this stereotype is not being reinforced by the lack of education and awareness. The disorder is seen by participants as being related solely to certain learners, who are being “hyperactive” and unable to concentrate in any educational setting. Other aspects of the disorder are often not recognised by the participants owing to their lack of knowledge about the disorder.

The study found that in addition to missing out on several ADHD symptoms by participants, that stereotypes exist regarding what causes ADHD, including perceptions, misconceptions and assumptions such as poor diet, bad parenting and incorrect behaviours during teaching and learning. From the findings of this study, some participants shared views that ADHD only occurs in the so called “naughty, lazy and bad behaving learners”. Perhaps one of the most damaging stereotypes surrounding learners perceived to have ADHD, from the opinions of the most participants is that of the “naughty, ill-disciplined and disruptive child”. This stereotype asserts that if a learner is just properly disciplined, then the symptoms of the disorder will be eliminated.

Most of the participants perceived that individual learners perceived to have ADHD were not properly parented. Linked to such perceptions and assumptions is the idea of poor parenting, with few boundaries placed by parents and permissive attitudes are responsible for any or all symptoms learners perceived to have ADHD suffer from. This could be very damaging to both the learners and the parents in this instance, who in most cases are often all trying extremely hard to find means of dealing with their challenges. When this stereotype comes into play in any

educational setting, it can lead to stress and frustration on the part of the teachers, which is the case with the current sample of participants.

## **5.3 RECOMMENDATIONS**

### **5.3.1 Teachers' experiences when dealing with learners perceived to have ADHD**

The study recommends that designs for potential research should focus on interceding to raise and improve teachers' experiences when dealing with learners perceived to have ADHD and needing attention, train and empower teachers about ADHD so that teachers understand what ADHD is like in classroom settings, appropriate intervention, teachers' knowledge about ADHD by producing opportunities for understanding learners perceived to have the disorder or other mental conditions associated with ADHD. Only through continued research efforts can change occur in the educational process that will positively impact the lives of learners perceived to have ADHD.

### **5.3.2 Interventions employed**

This section of the study focuses extensively on intervention participants indicated in their responses, in comparison to appropriate intervention to be employed. The focus is on intervention to enhance the learning environment for learners perceived to have ADHD. Strategies for academic interventions and behaviour management, will also be presented as recommendations.

From the outcomes of this study, it was found that addressing the needs of learners perceived to have ADHD is a complex issue and requires teachers to assess not only the learners' unique needs but also the demand of the classroom environment. More importantly, prevention strategies that address environmental variables should always be the first consideration when designing interventions for such learners. In the context of this study, most successful interventions are a combination of classroom support and strategies taught directly to learners to assist them to become more academically, socially and behaviourally successful.

This study suggests that there are at least three areas teachers must target when employing intervention. Firstly, the symptomatic behaviours, that is, inattention and hyperactivity comprising ADHD that can significantly disrupt classroom activities to a degree that deleteriously affects the learning of all other learners, not just those perceived to have ADHD. Therefore, the reduction of disruptive off task behaviours is an important goal for treatment.

Secondly, symptomatic behaviours also negatively impact on learners' interaction with their peers, teachers and other school professionals. A common goal for classroom-based treatment is increased positive social interactions with concomitant reduction in verbal and physical aggression.

Khademi, Safai, Davari-Ashtiani, Panaghi and Noorbakhsh (2015), recommend that educational interventions should be intended to improve knowledge, attitudes and behaviours of the teachers and the results be assessed in the long run. Based on the outcomes of this study and the significant impact of this disorder in the lives of such learners, all participants and other teachers need to be trained by experts with up-to-date information. Furthermore, discussion and interaction are required for changing participants' opinions. Therefore, it is recommended by this study that training sessions be in the form of instructional workshops. It is necessary that the outcomes of this study and other similar studies be used in educational planning and policy making by the Ministry within the DBE in South Africa.

This study suggests that teachers at that developmental stage of learners perceived to have ADHD need to have knowledge of the disorder and positive attitudes towards teaching such learners. In terms of the possibility of behavioural and social problems in learners perceived to have ADHD, school district level administrators are encouraged to work with institutions of higher education to produce alternative teacher certification programmes to help better prepare teachers to select and implement interventions that would maximise the likelihood of school success gap for learners perceived to have ADHD and other learning disabilities.

Third and lastly, inattentive and hyperactive impulsive behaviours frequently compromise learning and academic achievement. Therefore, the success of any

intervention is judged not only on reduction of disruptive, off task behaviours, but also with respect to improvement in the completion and accuracy of academic work.

It is recommended that in-service training concerning ADHD and other childhood development disorders be incorporated within the DBE teachers' development programmes. It is expected that such interventions could increase identification of learners perceived to have ADHD by knowledgeable teachers, give teachers greater confidence in their ability to manage these learners and improve overall classroom management within such settings. Further research is recommended to examine individual special education programme success in identification and instruction for learners with special education needs, to examine degree programmes that will help future educational leaders in the areas of differentiated instruction in special education and to observe excellent teacher development programmes that positively impact learners academic, social and behavioural success.

### **5.3.3 Classroom considerations**

All participants mentioned various intervention that they employed in classrooms when dealing with learners perceived to have ADHD. Some participants indicated that they would call the suspected learners to the front near the teacher and give such learners extra work to do, ask them to assist other learners, carry the teachers' material and so on. They did to keep such learners busy. Few participants indicated that they would send the suspected learners outside to perform some manual work as punishment, which in itself is a violation of the learners' rights to remain in class and be taught, irrespective of what the learners' behaviours are under the circumstances.

Piffner (2011) looks at the classroom considerations by teachers and indicates that the culture of the classroom can either support or create barriers to learners' success. Factors that foster attention, positive behaviours, academic and social success expected by teachers, include that the teachers must establish a positive relationship with their learners, adopting classroom management techniques and creating a physical arrangement that facilitates learning.

The findings from this study indicate that it is often a positive relationship with one teacher that facilitates classroom success for such learners. This area was addressed during the FGD interviews on when and how participants build rapport with their learners. Various responses were highlighted by majority of participants on when and how they build that positive relationship with learners. When participants connect with their learners and appreciate the learners' unique skills and interests, learners are more likely to strive for achievement and positively respond to classroom rules and procedures.

It is the view of this study that when using a proactive approach to classroom management, teachers support all learners and creating conducive conditions that prepare the learners for learning. Nel, Nel and Hugo (2013) support the afore mentioned view by indicating that all learners can learn and need support, also that learners' individual strengths need to be encouraged by their teachers. In this context, the view of this study, therefore, proposes that, some interventions for positive classroom management should include clear directions, meaningful feedbacks and opportunities for collaboration with peers.

However, in the opinion of this study, there are great opportunities to respond to when teaching learners perceived to have ADHD. These learners often have the most troublesome ways of attending to tasks during drill-and practice assignments because of the repetitive nature of the task at hand. Participants could use peer-mediated approaches listed below. These approaches are effective for learners perceived to have ADHD because they increase the learners' opportunities for engagement and active learning (Scheuermann & Hall, in press).

In creating peer-mediated activities, this study recommends that teachers may need to choose learners whose skills levels complement one another. Learners with or without attention difficulties and impulsivity should be considered for peer partnership. Teachers' additional strategies for learners' opportunities to respond are briefly noted and recommended next:

- Peer tutoring: This is one of the most effective strategies teachers can use for learners perceive to have ADHD because it provides many of the same

support as one-to-one instructions. It facilitates the acquisition of both academic and social skills.

- Cooperative learning: This strategy needs to be carefully structured to accommodate groups in which every learner is assigned a role and has clear expectations for desired outcomes which would be very helpful for learners perceived to have ADHD. The more structured the cooperative activities, the more likely it is that those learners will succeed.
- Sharing Strategies: Think; Pair; Share/Square/Group: The use of this particular approach by teachers is that learners will be able to work with peer partners to discuss the lesson, check one another's work and share strategies.
- Partner Reading: Learners' partners take turns in reading orally and listening to one another. Peer partners can also be helpful with discussing answers to comprehension questions, spelling, proof-reading, and solving numeracy problems.
- Self-Correction Opportunities: Learners could make use of calculators or a key function provided to the learner to check their answers.
- Learning Games: Teachers could use this strategy for learners to play games that reinforce skills such as sight, vocabulary, phonics, grammar rules, basic numeracy facts, for example, Bingo could be used to review basic facts and concepts. Learners perceived to have ADHD who require more immediate feedback and recognition of their efforts might begin with Bingo board that has only three cells across and three cells down. The number of cells can be gradually increased to across four, four down, then five, and so on.

#### **5.3.4 Classroom seating arrangements**

Most participants indicated how they dealt with learners perceived to have ADHD in classrooms. They mentioned that they will keep such learners away from distractive areas, such as, away from windows and other distractors. Some participants said that they would seat learners perceive to have ADHD away from distraction and close to the teaching and learning areas. This study further recommends that teachers could use the following to alleviate disruptions and distractions for such learners:

- A. By placing such learners in close proximity to instruction so that the teachers can monitor the learners.
- B. Place such learners alongside learners who are attentive worker.
- C. Create some distances between learners' desks.
- D. Place the learners away from distractions such as windows, the pencil sharpeners, doors, and other high-traffic areas.
- E. For independence work, use desks with attached chaired if available rather than tables where several learners are seated.
- F. If learners have a high need for movement, seating him/her near the back of the classroom may provide opportunities to make movements without distracting and disturbing other learners.

### **5.3.5 Classroom behaviour management strategies**

The findings of this study indicate that most participants lacked ways of managing disruptive learners in classrooms, such as those perceived to have ADHD. Therefore, the intention of classroom behaviour management strategies is to empower teachers to assist learners learn to manage their own behaviour. This study posits that the following strategies are most effective when used in conjunction with evidence-based instructional strategies.

The following are preventive measures that support learners perceived to have ADHD in demonstrating positive classroom behaviour, such as:

**Non-verbal support** together with such learners can be used by teachers, to develop inconspicuous, non-verbal messages such as an eye contact, hand gestures, or other signals that teach such learners to recognise the conditions that trigger specific behaviours. Once the system is developed, such learners can learn to manage their behavioural responses before they occur. Teachers can opt for **Choice as Reward**. Choice in and of itself appears to be highly reinforcing. Provide choices of activities between assignments or embed choices within assignments, or example, choices of material, readings, peer partners. Provision of choices also provide such learners practice in decision-making.

**Checking with Chimes:** To teach learners perceived to have ADHD to monitor their attention to tasks, teachers must set reminders at random intervals on an electronic



device, such as a smartphone or kitchen timer. Time intervals should be set based on such learners' attention span and pace of lesson (say three to five minutes). When the tones sound, the learners' charts or marks whether they are engaged in the learning. Simple yes or no checklist would work well.

**Proximity Control:** Teachers' proximity is highly recommended and is effective for assisting such learners to maintain their attention. For example, teachers may have to move closer to such learners when giving directions and monitoring seatwork.

**Timers:** Teachers should set timers to indicate as to how much time remains in the lesson or work period. The timer should be clearly visible so that learners perceived to have ADHD can check remaining time and monitor their progress.

**Reinforcement Strategies:** Learners perceived to have ADHD require specific and frequent feedback and or reinforcement immediately following the demonstration of a desired behaviours. When such learners are learning new behaviours, it is generally important to reinforce close approximations first as a way of shaping the behaviour. Once a behaviour is established, the frequency of reinforcement can be gradually decreased. Learners perceived to have ADHD tend to quickly lose interest with repetition. So, a variety of easy-to-implement reinforcers should be considered.

Verbal feedback as a reinforcer comprises of both praise and corrective statements. Teachers should consider the following when designing a behavioural plan, verbal praise, verbal redirection, corrective feedback as well as option for such learners. When providing corrective feedback or redirecting such learners, it is often helpful to provide such learners with options. For example, "Tom, can you do the task now, during lunch break, or after school."

#### **5.4 SIGNIFICANCE OF THE STUDY**

This study could be utilised as a form of resource document with information in assisting teachers to understand and cope when teaching learners perceived to have ADHD and its co-morbidities. It can be used to bring ADHD awareness, design appropriate classroom-based intervention for improving classroom environment, teachers' effectiveness and efficiency in the management of a number of aspects during teaching learners perceived to have ADHD. It can create a better classroom

atmosphere for teachers under general because teachers may find themselves having to teach learners with multiple mental conditions.

The findings and recommendations of this study as harvested from the participants' best practices will equip teachers with the means of dealing with learners perceived to have the disorder, become knowledgeable about ADHD which will change their attitudes in the classroom setting in township schools around South Africa. It will make the DBE aware of regulations, legislations, measures, and policies needed to mitigate the classroom challenges teachers are faced with on daily basis regarding inclusion of learners perceived to have ADHD in mainstream classrooms.

## **5.5 LIMITATIONS**

In terms of the number of Soweto mainstream primary schools participating in the study, some limitations were experienced during the process of this study. These include the number of primary schools taking part in this study, failure to continue taking part in the study by the first four prospective mainstream primary schools, amended letter of approval from the DBE head office, access to enter grade three classrooms, representation of grade 3 teachers and White Paper 6 on Inclusive Education.

Firstly, the study only involved four Soweto mainstream primary schools from four different districts and this might in a way limit the generalisation of the study's findings, despite generalisation being not the purpose of this study.

Secondly, the initial prospective mainstream primary schools failed to continue to participate in the study even after the prospective participants had signed both the consent and confidentiality agreement forms. The principals of the four schools failed to convene meetings with the prospective participants on behalf of the researcher to start with the research process even after the researcher had constantly called and driven to schools to meet with the prospective participants on numerous occasions as follow-up.

Thirdly, the researcher had to request for an amended letter of approval from the GDE to request that other prospective schools take part in this study. This was done

after the researcher had consulted with the supervisor regarding the slow pace at which the first four schools were responding to and failure to continue taking part in this study. Fourthly, the researcher was denied access into classrooms to observe participants dealing with learners perceived to have ADHD to have first-hand experience of the classrooms happening in comparison to the participants' FGDs, in-depth interviews and questionnaire responses. Therefore, it cannot be conclusive that all grade 3 teachers are either supportive or not supportive of such learners during the teachers' teaching practices.

Fifth, the findings represent only grade 3 teachers from four schools taking part in this study teaching learners perceived to have ADHD in Soweto mainstream primary schools. Certainly, these may not be true reflections of most grade three teachers' classroom experiences of learners perceived to have ADHD in other schools around Soweto.

Sixth, since the introduction of the White Paper 6 on Inclusive Education, which dictates that teachers teach in an inclusive classroom situation, this study found most participants in this study had not familiarised themselves with the document and implementing its content, which could have been the bases of understanding for this study.

The following questions could be addressed for any further study:

How can this stereotyping be avoided?

How can teachers avoid victimising, ridiculing, contempt and discriminating learners perceived to have ADHD?

## **5.6 CONCLUSIONS**

The findings of this study indicate that participants experience challenges when dealing with learners perceived to have ADHD. This could be owing to participants lacking insight and knowledge of what ADHD is, how it can manifest in the classroom settings and failure to employ effective, efficient and appropriate interventions when dealing with such learners rather than dismissing such learners as naughty or products of poor parenting for instance. Overall, there was a poor participants' knowledge about ADHD where this study was conducted. While there

is a profound lack of epidemiological data concerning ADHD from the four schools taking part in this study, there is no reason to presume that the prevalence rates are lower in other Soweto mainstream primary schools as compared with elsewhere in the world. Therefore, there is a need for teachers from the four schools taking part in this study and perhaps in other schools to be trained about ADHD so that they are better equipped when having to deal with such learners. It is the view of this study that in-service training concerning ADHD will significantly improve knowledge, attitudes and intervention skills of teachers, given that very few teachers in this study demonstrated insight about ADHD in the classroom.

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## APPENDICES

### **APPENDIX A: INVITATION LETTER FOR GRADE 3 TEACHERS TO PARTICIPATE IN THE STUDY**

#### **INVITATION LETTER FOR GRADE 3 TEACHERS TO PARTICIPATE IN THE STUDY**

January 2018

Title: "grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools."

**DEAR PROSPECTIVE PARTICIPANT**

My name is Elijah Krone Maema, and I am doing research under the supervision of Dr R. J. Tabane, a senior lecturer in the Department of Psychology towards a PhD at the University of South Africa. We have funding from the University of South Africa Student Funding to meet the research expectations and expenses. We are inviting you to participate in the study entitled "Exploring Grade 3 teachers' experiences and understanding of Attention Deficit Hyperactivity/impulsivity Disorder and intervention strategies applied in Soweto Mainstream Primary Schools."

#### **WHAT IS THE PURPOSE OF THE STUDY?**

The purpose of the study was to explore grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools with the aim of harvesting intervention strategies (if any) employed in teaching learners perceived to have ADHD.

#### **WHY YOU ARE BEING INVITED TO PARTICIPATE?**

You are being invited because your experience and expertise within a Grade 3 classroom setting with diverse learners is very vital, in that on daily basis you are able to observe and compare how learners react in a formal structured classroom situation. I obtained your contact details from the principal of the school having received permission from both the Provincial Department of Education (DBE) and the district under which you work to enter the school premises. Only Grade 3 teachers will be participating in this study from your school.

#### **WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?**

Your participation in this study is to assist the researcher in answering the research questions by sharing your classroom and school experiences of ADHD. You will also help the researcher to understand the types of intervention strategies you apply

when teaching learners in classrooms whose behaviours mimic ADHD or those learners perceived to have ADHD during interviews. The study involves having to audio tape your responses during both the focus and one-on-one interviews. The focus group interviews will last for one hour and 30 minutes and the one-on-one interviews for sixty minutes. These interviews will take place after learners and teachers' contact time, so as to respect the culture of teaching and learning and at your convenient date and time agreed upon between yourself and the researcher.

**CAN I WITHDRAW FROM THE STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?**

Participation in this study is voluntary and you are under no obligation to consent in your participation. If you do decide to take part, you will be given this information sheet to keep and asked to sign a written consent form. You are free to withdraw at any time and without giving any reasons.

**WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY ?**

There are no material benefits besides that the participating Grade 3 teachers will gain knowledge about ADHD, how to identify learners with ADHD, why certain learners behave in the way they do in classrooms and what intervention strategies to apply when teaching such learners.

**ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?**

There won't be any negative consequences that the researcher might think off or foresee besides that should you decide to take part in this study, you might experience some form of inconvenience, embarrassment and discomfort during the focus group interviews, and might withhold vital data that you wanted to share with the researcher during the presence of other Grade 3 teachers from your school.

**WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?**

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and other identified members of the research team, will know about your involvement in this research as confidentiality will be upheld at all costs by all research team members. Your name will not be recorded anywhere, and no one will be able to connect you to the answers you gave, as pseudonyms will be used in order to uphold measures of anonymity. Your answers will be given code numbers or pseudonyms and you will also be referred in this way



in the data, any publications, or other research reporting methods such as conference proceedings as a measure of confidentiality.

Only the researcher, the researcher's supervisor and the ethics committee members will have access to the data. All these personnel will have to sign a confidential agreement memorandum, and the memorandum will then be submitted to the Research Ethics Committee for considerations. As a participant, your answers may be reviewed by the people responsible to ascertain that the research is conducted properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available to people working on the study, unless you give permission in writing for others to see the records.

Please take note that a report of the study may be submitted for publication, but individuals who participated in the study will not be mentioned or identified in such a report. Please bear in mind that it is sometimes impossible to make an absolute guarantee to uphold measures of confidentiality or anonymity in that regard, due to focus group interviews as a method of data collection.

Focus group interviews, in this instance, is when a group of individuals come together and explore various ideas, beliefs, opinions and behaviours over a given topic. Individuals will have to respect one another's inputs and contributions, they have the right to choose to either respond or not to. While every effort will be made by the researcher to ensure that individual participants are not connected to the information that they share during the focus group, the researcher cannot guarantee that other participants in the focus group will treat the given information with confidentiality. The researcher shall, however, encourage and advise all participants to do so. For this reason, the researcher advises the participants not to disclose any personal sensitive information during the focus group interviews.

#### **HOW WILL THE RESEARCH(S) PROTECT THE SECURITY OF DATA?**

Hard copies of your answers will be stored by the researcher for a period not less than five years in a locked cupboard or filing cabinet in the supervisor's office at the University of South Africa for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. All hard copied will be shredded and electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme.

**WILL I RECEIVE PAYMENT OR ANY INCENTIVE FOR PARTICIPATING IN THIS STUDY?**

There will be no payment or incentive of any sort for taking part in the study.

**HAS THE STUDY RECEIVED ETHICS APPROVAL?**

The study has received written approval from the Research Ethics Review Committee of the University of South Africa, Unisa. A copy of the approval letter can be obtained from the researcher if the participant so wish.

**HOW WILL I BE INFORMED**

If you would like to be informed of the final research findings, please contact Elijah Krone Maema on mobile numberXXXXXXXX or email [ekmaema@live.com](mailto:ekmaema@live.com) .

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Elijah Krone Maema, [ekmaema@live.com](mailto:ekmaema@live.com)

Should you have concerns about the way in which the research has been conducted, you may contact Dr R. J. Tabane, [tabanrj@unisa.ac.za](mailto:tabanrj@unisa.ac.za) or call XXXXXX

Thanking you for taking time to read this information sheet and for participating in this study.

Thank you in advance

---

Elijah Krone Maema  
(PhD student)

## APPENDIX B: ETHICAL CLEARANCE CERTIFICATE



### UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2017/08/16

Ref: **2017/08/16/53972562/13/MC**

Name: Mr EK Maema

Student: 53972562

Dear Mr Maema,

**Decision:** Ethics Approval from  
2017/08/16 to 2022/08/16

---

#### Researcher:

Name: Mr EK Maema

Email: ekmaema@live.com

Telephone: 082 456 8664

#### Supervisor:

Name: Dr R Tabane

Email: tabanrj@unisa.ac.za

Telephone: 012 4292056

---

#### Title of research:

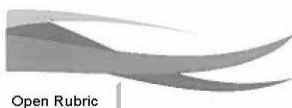
**Exploring Grade 3 teachers' experiences and understanding of Attention Deficit Hyperactivity Disorder and intervention strategies applied in Soweto mainstream primary schools**

**Qualification:** D Ed in Psychology of Education

---

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2017/08/16 to 2022/08/16.

*The low risk application was reviewed by the Ethics Review Committee on 2017/08/16 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*



University of South Africa  
Preller Street, Muckleneuk Ridge, City of Tshwane  
PO Box 392 UNISA 0003 South Africa  
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150  
[www.unisa.ac.za](http://www.unisa.ac.za)

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after the expiry date 2022/08/16. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

*Note:*

*The reference number **2017/08/16/53972562/13/MC** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,



**Dr M Claassens**

**CHAIRPERSON: CEDU RERC**  
mcdtc@netactive.co.za



**Prof V McKay**

**EXECUTIVE DEAN**

Approved - decision template – updated 16 Feb 2017

University of South Africa  
Preller Street, Muckleneuk Ridge, City of Tshwane  
PO Box 392 UNISA 0003 South Africa  
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150  
www.unisa.ac.za

## APPENDIX C: GAUTENG DEPARTMENT OF BASIC EDUCATION (GDE) FORM



**GAUTENG PROVINCE**  
 EDUCATION  
 REPUBLIC OF SOUTH AFRICA

For admin. use only:

Ref. no.:

### 2017 GDE RESEARCH REQUEST FORM.

#### REQUEST TO CONDUCT RESEARCH IN INSTITUTIONS AND/OR OFFICES OF THE GAUTENG DEPARTMENT OF EDUCATION

##### 1. PARTICULARS OF THE RESEARCHER

1.1	Details of the Researcher	
a) Surname and Initials:	MAEMA E.K.	
b) First Name/s:	ELIJAH KRONE	
c) Title (Prof/Dr/Mr/Mrs/Ms):	MR	
d) Student Number:	53972562	
e) SA ID Number:	5306045701089	
f) Work permit no. (If not SA citizen)	N/A	

1.2	Private Contact Details	
	a. Home Address	c. Postal Address (if different)
	544/17 Typhoon and Fulmer Strs	Box 82453
	Ormonde View	Southdale

<b>b. Postal Code:2190</b>	<b>d. Postal Code: 2135</b>
<b>e. Tel: N/A</b>	<b>f. Cell: 082-456-8664</b>
<b>g. Fax: N/A</b>	<b>h. E-mail: <a href="mailto:ekmaema@live.com">ekmaema@live.com</a></b>

## 2. PURPOSE & DETAILS OF THE PROPOSED RESEARCH

<b>2.1</b>	<b>Purpose of the Research (Place a cross where appropriate)</b>
	<i>Undergraduate Study - Self</i>
	<i>Postgraduate Study - Self</i> X
	<i>Private Company/Agency – Commissioned by Provincial Government or Department</i>
	<i>Private Research by Independent Researcher</i>
	<i>Non-Governmental Organisation</i>
	<i>National Department of Education</i>
	<i>Commissions and Committees</i>
	<i>Independent Research Agencies</i>
	<i>Statutory Research Agencies</i>
	<i>Higher Education Institutions only</i>
<b>2.2</b>	<b>Full title of Thesis / Dissertation / Research Project</b>
	Exploring Grade 3 teachers' experiences and understanding of Attention Deficit Hyperactivity/impulsivity Disorder (ADHD) and intervention strategies applied in South Weston Townships (Soweto) mainstream primary schools.
<b>2.3</b>	<b>Value of the Research to Education (Attach Research Proposal)</b>
	Proposal attached : Yes
	The value of the research to education is that it will bring ADHD awareness to grade 3 teachers, it will also help them to understand learners perceived to have the condition. Furthermore the research will empower the teachers with intervention strategies when teaching learners perceived to have this condition.
<b>2.4</b>	<b>Date</b>

<b>a. <u>Estimated</u> date of completion of research in GDE Institutions</b>		<b>30.06.2018</b>
<b>b. <u>Estimated</u> date of submission of Research Report /Thesis/Dissertation and Research Summary to GDE:</b>		<b>30. 06. 2019</b>
<b>2.5</b>	<b>Student and Postgraduate Enrolment Particulars</b>	
<b>a. Name of institution where enrolled:</b>		University of South Africa (Unisa)
<b>b. Degree / Qualification:</b>		Doctorate
<b>c. Faculty and Discipline / Area of Study:</b>		Psychology of Education
<b>d. Name of Supervisor / Promoter:</b>		Professor R Tabane

<b>2.6</b>	<b>Employer (or state Unemployed / or a Full Time Student) :</b>	
<b>a. Name of Organisation:</b>		N/A
<b>b. Position in Organisation:</b>		N/A
<b>c. Head of Organisation:</b>		N/A
<b>d. Street Address:</b>		N/A
<b>e. Postal Code:</b>		N/A
<b>f. Telephone Number (Code + Ext):</b>		N/A
<b>g. Fax Number:</b>		N/A
<b>h. E-mail address:</b>		N/A

<b>2.7</b>	<b>PERSAL Number (GDE employees only)</b>
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N/A							
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### 3. PROPOSED RESEARCH METHOD/S

(Please indicate by placing a cross in the appropriate block whether the following modes would be adopted)

#### 3.1. Questionnaire/s (If Yes, supply copies of each to be used)

YES		NO	X
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**3.2. Interview/s (If Yes, provide copies of each schedule)**

YES	X	NO	
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**3.3. Use of official documents**

YES		NO	X
<i>If Yes, please specify the document/s: Reading screening and progress reports</i>			

**3.4. Workshop/s / Group Discussions (If Yes, Supply details)**

YES	X	NO	
Focus Group Discussions will take place			

**3.5. Standardised Tests (e.g. Psychometric Tests)**

YES		NO	X
<i>If Yes, please specify the test/s to be used and provide a copy/ies</i>			
N/A			

**4. INSTITUTIONS TO BE INVOLVED IN THE RESEARCH**

**4.1. TYPE and NUMBER of Institutions (Please indicate by placing a cross alongside all types of institutions to be researched)**

INSTITUTIONS	Write NUMBER here
<i>Primary Schools</i>	4
<i>Secondary Schools</i>	N/A
<i>ABET Centres</i>	N/A



<b><i>ECD Sites</i></b>	N/A
<b><i>LSEN Schools</i></b>	N/A
<b><i>Further Education &amp; Training Institutions</i></b>	N/A
<b><i>Districts and / or Head Office</i></b>	N/A

4.2. Name/s of institutions to be approached for research (Please complete on a separate sheet if space is found to be insufficient).

Name/s of Institution/s
<b><i>Harry Gwala Primary School</i></b>
<b><i>Nkone Maruping Primary School</i></b>
<b><i>Govan Mbeki Primary School</i></b>
<b><i>Intlonipho Primary School</i></b>

1.0.

1.3. District/s where the study is to be conducted. (Please indicate by placing a cross alongside the relevant district/s)

District/s			
<b><i>Ekurhuleni North</i></b>		<b><i>Ekurhuleni South</i></b>	
<b><i>Gauteng East</i></b>		<b><i>Gauteng North</i></b>	
<b><i>Gauteng West</i></b>		<b><i>Johannesburg Central</i></b>	
<b><i>Johannesburg East</i></b>		<b><i>Johannesburg North</i></b>	
<b><i>Johannesburg South</i></b>	<b>X</b>	<b><i>Johannesburg West</i></b>	<b>X</b>
<b><i>Sedibeng East</i></b>		<b><i>Sedibeng West</i></b>	
<b><i>Tshwane North</i></b>		<b><i>Tshwane South</i></b>	
<b><i>Tshwane West</i></b>			

<b>If Head Office/s (Please indicate Directorate/s)</b>
---

N/A

1.4. Approximate number of learners to be involved per school (Please indicate the number by gender) N/A

Grade	1		2		3		4		5		6	
Gender	B	G	B	G	B	G	B	G	B	G	B	G
Number					122	148						

Grade	7		8		9		10		11		12	
Gender	B	G	B	G	B	G	B	G	B	G	B	G
Number												

1.5. Approximate number of educators/officials involved in the study (Please indicate the number in the relevant column)

Type of staff	Educators	HODs	Deputy Principals	Principal	Lecturers	Office Based Officials
Number	24	N/A	N/A	N/A	N/A	N/A

4.6 Letters of Consent (Attach copies of Consent letters to be used for Principal, SGB and all participants. For learners also include parental consent letter)

4.7 Are the participants to be involved in groups or individually?

Groups	Yes	Individually	Yes

4.8 Average period of time each participant will be involved in the test or other research activities (Please indicate time in minutes for ALL participants)

Participant/s	Activity	Time
Grade 3 teachers	Focus group interviews	90 minutes

Grade 3 teachers	individual interviews	60 minutes
------------------	-----------------------	------------

4.9 Time of day that you propose to conduct your research.

<u>Before school hours</u>	<u>X</u>	<u>During school hours (for limited observation only)</u>	<u>X</u>	<u>After School Hours</u>	<u>X</u>
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SEE Condition 5.4 on Page 7

4.10 School term/s during which the research would be undertaken


<i>First Term</i>	X	<i>Second Term</i>	X	<i>Third Term</i>	N/A
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**5. CONDITIONS FOR CONDUCTING RESEARCH IN GDE**

**Permission may be granted to proceed with the above study subject to the conditions listed below being met and permission may be withdrawn should any of these conditions be flouted:**

- 5.1 *The District/Head Office Senior Manager/s concerned, the Principal/s and the chairperson/s of the School Governing Body (SGB.) must be presented with a copy of this letter.*
- 5.2 *The Researcher will make every effort to obtain the goodwill and co-operation of the GDE District officials, principals, SGBs, teachers, parents and learners involved. Participation is voluntary and additional remuneration will not be paid;*
- 5.3 *Research may only commence from the second week of February and must be concluded by the end of the THIRD quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.*
- 5.4 *Research may only be conducted BEFORE or AFTER school hours so that the normal school program is not interrupted. The Principal and/or Director must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
- 5.5 *Items 3 and 4 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and paid for by the Gauteng Department of Education.*
- 5.6 *It is the researcher's responsibility to obtain written consent from the SGB/s; principal/s, educator/s, parents and learners, as applicable, before commencing with research.*
- 5.7 *The researcher is responsible for supplying and utilizing his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institution/s, staff and/or the office/s visited for supplying such resources.*
- 5.8 *All research conducted in GDE Institutions is anonymous. The names and personal details of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may neither be asked nor appear in the research title, report / thesis/ dissertation or GDE Research Summary.*
- 5.9 *On successful completion of the study the researcher must supply the Director: Education Research and Knowledge Management, with electronic copies of the Research Report, Thesis, Dissertation as well as a Research Summary (on the GDE Summary template). Failure to submit these documents may result in future permission being withheld, or a fine imposed for BOTH the Researcher and the Supervisor.*

- 5.10 *Should the researcher have been involved with research at a school and/or a district/head office level, the Director/s and school/s concerned must also be supplied with a GDE Summary.*
- 5.11 *The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned;*

<b>6. DECLARATION BY THE RESEARCHER</b>	
<b>6.1</b> <i>I declare that all statements made by myself in this application are true and accurate.</i>	
<b>6.2</b> <i>I have read, understand and accept ALL the conditions associated with the granting of approval to conduct research in GDE Institutions and I undertake to abide by them. I understand that failure to comply may result in permission being withdrawn, further permission being withheld, a fine imposed and legal action may be taken against me. This agreement is binding.</i>	
<b>6.3</b> <i>I promise once I have successfully completed my studies, (before graduation) or on successful project completion, to submit electronic copies of my Research Report / Thesis / Dissertation as well a GDE Summary on the GDE template sent to me with my approval letter or found on <a href="http://www.education.gpg.gov.za">www.education.gpg.gov.za</a></i>	
<b>Signature:</b>	
<b>Date:</b>	<b>09.02.2018</b>
<b>7. DECLARATION BY SUPERVISOR / LECTURER / PROMOTER</b>	
<b>7.1</b> <i>I declare that: (Name of <u>Researcher</u>): <b>Elijah Krone Maema</b></i>	
<b>7.2</b> <i>_____ is enrolled at the institution / employed by the organisation to which the undersigned is attached.</i>	

<p><b>7.3 The questionnaires / structured interviews / tests meet the criteria of:</b></p> <ul style="list-style-type: none"> <li>• <i>Educational Accountability;</i></li> <li>• <i>Proper Research Design;</i></li> <li>• <i>Sensitivity towards Participants;</i></li> <li>• <i>Correct Content and Terminology;</i></li> <li>• <i>Acceptable Grammar;</i></li> <li>• <i>Absence of Non-essential / Superfluous items;</i></li> <li>• <i>Ethical clearance</i></li> </ul>	
<p><b>7.4 The student / researcher has agreed to ALL the conditions of conducting research in GDE Institutions and will abide by them.</b></p>	
<p><b>7.5 I will ensure that after success completion of the research degree / project / study an electronic copy of the Research Report / Thesis / Dissertation and a Research Summary (on the GDE template) will be sent to the GDE. Failure to submit the Research Report, Thesis, Dissertation and Research Summary may result in: permission being withheld from BOTH the student and the Supervisor in future and a fine may be imposed.</b></p>	
<b>7.6 Surname:</b>	Tabane
<b>7.7 First Name/s:</b>	Ramodungoane
<b>7.8 Title:</b>	Professor
<b>7.9 Institution / Organisation:</b>	University of South Africa (UNISA)
<b>7.10 Faculty / Department:</b>	Education/Psychology of Education
<b>7.11 Telephone:</b>	012-429-2056
<b>7.12 E-mail address:</b>	<a href="mailto:tabanrj@unisa.ac.za">tabanrj@unisa.ac.za</a>
<b>7.13 Signature:</b>	
<b>7.14 Date:</b>	20.02.2018

## **ANNEXURE A: GROUP RESEARCH**

This information must be completed by every researcher/ student / field worker who will be visiting GDE Institutions for research purposes, besides the main researcher who applied and the Supervisor/ lecturer / Promoter of the research.

By signing this declaration, the researcher / students / fieldworker accepts the conditions associated with the granting of approval to conduct research in GDE Institutions and undertakes to abide by them.

### **Supervisor/ Promoter / Lecturer's Surname and**

**Name**.....

### **DECLARATION BY RESEARCHERS / STUDENTS:**

<b>Surname &amp; Initials</b>	<b>Name</b>	<b>Tel</b>	<b>Cell</b>	<b>Email address</b>	<b>Signature</b>

**N.B.** This form (and all other relevant documentation where available) may be completed and forwarded electronically to [Gumani.Mukatuni@gauteng.gov.za](mailto:Gumani.Mukatuni@gauteng.gov.za) and please copy (cc) [David.Makhado@gauteng.gov.za](mailto:David.Makhado@gauteng.gov.za); [Faith.Tshabalala@gauteng.gov.za](mailto:Faith.Tshabalala@gauteng.gov.za) and [ResearchInfo@gauteng.gov.za](mailto:ResearchInfo@gauteng.gov.za). The last 2 pages of this document must however have the original signatures of both the researcher and his/her supervisor or promoter. It should be scanned and emailed, posted or hand delivered (in a sealed envelope) to Gumani Mukatuni, 7<sup>th</sup> Floor Marshal Street, Johannesburg. All enquiries pertaining to the status of research requests can be directed to Gumani Mukatuni on tel. no. 011 355 0775.

### **Other Information:**

- i) On receipt of all emails, confirmation of receipt will be sent to the researcher. The researcher will be contacted via email if any documents are missing or if any additional information is needed.

- ii) If the GDE Research request submitted is approved, a GDE Research Approval letter will be sent by email to the researcher as well as the Supervisor / Lecturer / Promoter. Please ensure that your email address is correct.
  
- iii) After successful completion of your research, please send your Research Reports / Thesis / Dissertations and GDE Research Summaries (on the template provided to both the Researcher and the Supervisor with the GDE Research Approval letter) to the same addresses as the GDE Research Request documents were sent to, namely: [Gumani.Mukatuni@gauteng.gov.za](mailto:Gumani.Mukatuni@gauteng.gov.za) and copy [David.Makhado@gauteng.gov.za](mailto:David.Makhado@gauteng.gov.za) ; or [Faith.Tshabalala@gauteng.gov.za](mailto:Faith.Tshabalala@gauteng.gov.za) and [ResearchInfo@gauteng.gov.za](mailto:ResearchInfo@gauteng.gov.za).

## **APPENDIX D: LETTER TO THE DISTRICTS REQUESTING PERMISSION TO COLLECT DATA IN THE SCHOOLS**

### **Request for permission to conduct research at four districts within your jurisdiction.**

Title of the research: "Title: "grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools."

January 2018

Mr Shadrack Phele

Gauteng Department of Education (GDE)

111 Commissioner Street

Johannesburg

Dear Mr Shadrack Phele

I, Elijah Krone Maema, am doing research under supervision of Dr R.J. Tabane, who is a senior lecturer in the Department of Psychology of Education at the University of South Africa (Unisa). I am currently studying towards my Doctorate degree in the field of Psychology of Education at the University of South Africa. We have funding from the University of South Africa students' funding in order to fulfil all the research expenses and requirements for this study. We are inviting you to participate in the study entitled "Exploring Grade 3 teachers' experiences and understanding of Attention Deficit Hyperactivity/impulsivity Disorder and the type of intervention strategies teachers apply in Soweto Mainstream Primary Schools".

The purpose of the study was to explore grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools with the aim of harvesting intervention strategies (if any) employed in teaching learners perceived to have ADHD.

The study will entail having to get a clearance certificate from the Ethics Committee of the University of South Africa (Unisa), requesting permission to conduct research from the Gauteng Provincial Department of Basic Education (DBE), the four districts, namely Johannesburg North (JN), Johannesburg Central (JC), Johannesburg West (JW) and Gauteng West (GW), as well as the school principals to allow the researcher to enter the research sites. Participants will be explained as to the process of the research and will be requested to sign consent forms and interview



letters once the participants have agreed to take part, and ethical measures will be extensively explained to participants. The benefits of this research study are educational and that the participating Grade 3 teachers will understand what ADHD is, the criterion to follow on how to identify such learners and what intervention strategies to use when teaching learners with ADHD and those perceived to have ADHD in their Grade 3 classroom settings. The participants will be influential on the academic and behavioural outcomes of those identified learners with ADHD or perceived to have it.

There are no foreseeable risks as the topic is not sensitive and besides, that some participants might feel inconvenienced during the focus group interviews to raise certain critical view points of their classroom experiences and understanding. There will no reimbursement or any incentive for participation in the research. Feedback procedure will entail writing to workshop participants of the outcomes. I have received a clearance certificate from the Ethics Committee of the University of South Africa (please find attached copy thereof), and will therefore adhere to the following ethical measures in an endeavour to protect participants during the research process. The ethical measures are as follows:

- Ethical clearance from the College of Education of the University of South Africa has been obtained in order to conduct the research.
- Permission to conduct the research at the sites will be requested from the Gauteng Department of Education. In addition, each district will be requested to allow the researcher permission to enter the research site/s, and school principals will be approached to grant the researcher permission to interview prospective participating Grade 3 teachers who will be taking part in the study. Once prospective participating Grade 3 teachers have agreed to assist the researcher, they will be requested to sign consent forms and interview letters.
- Permission will be obtained from participants as to whether interviews can be audio-recorded.
- The principle of voluntary participation will guarantee the right of the participants to withdraw from the research at any time without any penalty. They may, for example, refuse to answer any question/s and be interviewed at reasonable times.

- The principle of informed consent means that the participants should at all times be fully informed about the research process and purposes, and first give their consent to participate. This will follow after an initial explanation of the research topic, the potential benefits and risks or harm involved. This however, remains a two-way dialogue and continuous process.
- The principle of safety requires that participants not be placed at risk or harm of any kind.
- The principle of privacy, incorporating the principle of confidentiality and anonymity will be applied, pseudonyms will be upheld. The identity of the participants as well as the information gathered will be kept anonymous and confidential.
- The principle of trust, especially in conducting interviews and other in-depth data collection methods, will allow trust gradually to develop. The researcher must be careful and sensitive in not exploiting this trust for personal gain or benefit, deceiving or betraying the participants in the research route or its published outcomes.

I envisage conducting this research after teacher-learner contact hours to minimise possible interruptions of teaching and learning, thereby respecting the culture of teaching and learning. It is the researcher's intention to share the research findings and recommendations after the completion of the PhD thesis with the participating Grade 3 teachers, the principals of participating schools, the four districts and Gauteng Department of Education (GDE) after the data has been collected and analysed.

Should you have any queries about the proposed study, please contact me using the following details:

Elijah Krone Maema

Contact number: xxxxxxx

Email: [ekmaema@live.com](mailto:ekmaema@live.com)

Should you have any queries about me or the proposed study, please feel free to contact my supervisor at the University of South Africa using the following details:

Name: Dr Ramodugoane Tabane

## **APPENDIX E: LETTER TO THE SCHOOL PRINCIPALS REQUESTING PERMISSION TO COLLECT DATA IN THEIR SCHOOLS**

### **Request for permission to conduct research at in the schools**

Title of the research: “Title: “grade three teachers’ experiences of learners perceived to have ADHD in Soweto mainstream primary schools.”

January 2018

The Principal

Name of the School

Address of the school

I, Elijah Krone Maema, am doing research under supervision of Dr R.J. Tabane, who is a senior lecturer in the Department of Psychology of Education at the University of South Africa (Unisa). I am currently studying towards my Doctorate degree in the field of Psychology of Education at the University of South Africa. We have funding from the University of South Africa students’ funding in order to fulfil all the research expenses and requirements for this study. We are inviting you to participate in the study entitled “Exploring Grade 3 teachers’ experiences and understanding of Attention Deficit Hyperactivity/impulsivity Disorder and the type of intervention strategies teachers apply in Soweto Mainstream Primary Schools”. Permission for schools in Soweto to participate in this study will be sought from the district office for your school to participate in the study.

The purpose of the study was to explore grade three teachers’ experiences of learners perceived to have ADHD in Soweto mainstream primary schools with the aim of harvesting intervention strategies (if any) employed in teaching learners perceived to have ADHD.

The study will entail having to get a clearance certificate from the Ethics Committee of the University of South Africa (Unisa), requesting permission to conduct research from the Gauteng Provincial Department of Basic Education (DBE), the four districts, namely Johannesburg North (JN), Johannesburg Central (JC), Johannesburg West (JW) and Gauteng West (GW), as well as the school principals to allow the researcher to enter the research sites. Participants will be explained as to the process of the research and will be requested to sign consent forms and interview letters once the participants have agreed to take part, and ethical measures will be

extensively explained to participants. The benefits of this research study are educational and that the participating Grade 3 teachers will understand what ADHD is, the criterion to follow on how to identify such learners and what intervention strategies to use when teaching learners with ADHD and those perceived to have ADHD in their Grade 3 classroom settings. The participants will be influential on the academic and behavioural outcomes of those identified learners with ADHD or perceived to have it.

There are no foreseeable risks as the topic is not sensitive and besides, that some participants might feel inconvenienced during the focus group interviews to raise certain critical view points of their classroom experiences and understanding. There will no reimbursement or any incentive for participation in the research. Feedback procedure will entail writing to workshop participants of the outcomes. I have received a clearance certificate from the Ethics Committee of the University of South Africa (please find attached copy thereof), and will therefore adhere to the following ethical measures in an endeavour to protect participants during the research process. The ethical measures are as follows:

- Ethical clearance from the College of Education of the University of South Africa has been obtained in order to conduct the research.
- Permission to conduct the research at the sites will be requested from the Gauteng Department of Education. In addition, each district will be requested to allow the researcher permission to enter the research site/s, and school principals will be approached to grant the researcher permission to interview prospective participating Grade 3 teachers who will be taking part in the study. Once prospective participating Grade 3 teachers have agreed to assist the researcher, they will be requested to sign consent forms and interview letters.
- Permission will be obtained from participants as to whether interviews can be audio-recorded.
- The principle of voluntary participation will guarantee the right of the participants to withdraw from the research at any time without any penalty. They may, for example, refuse to answer any question/s and be interviewed at reasonable times.

- The principle of informed consent means that the participants should at all times be fully informed about the research process and purposes, and first give their consent to participate. This will follow after an initial explanation of the research topic, the potential benefits and risks or harm involved. This however, remains a two-way dialogue and continuous process.
- The principle of safety requires that participants not be placed at risk or harm of any kind.
- The principle of privacy, incorporating the principle of confidentiality and anonymity will be applied, pseudonyms will be upheld. The identity of the participants as well as the information gathered will be kept anonymous and confidential.
- The principle of trust, especially in conducting interviews and other in-depth data collection methods, will allow trust gradually to develop. The researcher must be careful and sensitive in not exploiting this trust for personal gain or benefit, deceiving or betraying the participants in the research route or its published outcomes.

I envisage conducting this research after teacher-learner contact hours to minimise possible interruptions of teaching and learning, thereby respecting the culture of teaching and learning. It is the researcher's intention to share the research findings and recommendations after the completion of the PhD thesis with the participating Grade 3 teachers, the principals of participating schools, the four districts and Gauteng Department of Education (GDE) after the data has been collected and analysed.

Should you have any queries about the proposed study, please contact me using the following details:

Elijah Krone Maema

Contact number: xxxxxxxx

Email: [ekmaema@live.com](mailto:ekmaema@live.com)

Should you have any queries about me or the proposed study, please feel free to contact my supervisor at the University of South Africa using the following details:

Name: Dr Ramodugoane Tabane

## **APPENDIX F: LETTER TO THE DISTRICTS REQUESTING PERMISSION TO COLLECT DATA IN THE DISTRICT**

Title: "Title: "Grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools."

**January 2018**

The District Director

Dear Sir/madam

I, Elijah Krone Maema, am currently studying towards my Doctorate in the field of Psychology of Education under the supervision of Dr R. Tabane a senior lecturer in the Department of Psychology of Education at the University of South Africa (UNISA), and as such, I am required to conduct research within the aforementioned field of education. I am writing to request permission to conduct research for my PhD within the district/s of Johannesburg North, Johannesburg Central, Johannesburg West and Gauteng West, sampling one school from each district and six Grade 3 teachers from each school.

The purpose of the study was to explore grade three teachers' experiences of learners perceived to have ADHD in Soweto mainstream primary schools with the aim of harvesting intervention strategies (if any) employed in teaching learners perceived to have ADHD.

I have received permission from Gauteng Department of Education (GDE) and a clearance certificate from the Ethics Committee of the University of South Africa (please find attached copy of the clearance certificate), and will therefore adhere to the following ethical measures in an endeavour to protect participants during the research process. The ethical measures are as follows:

- Ethical clearance from the College of Education from the University of South Africa has been obtained in order to conduct the research.
- Permission to conduct the research at the sites has been requested and granted by the Gauteng Department of Education. In addition, each district will be requested to allow the researcher permission to enter the research

site, and school principals will be approached for them to grant the researcher a go ahead to interview teachers who will be participating in the study. Once participating teachers have agreed to assist the researcher in dealing with the research questions, they will be asked to sign consent forms and interview letters.

- Permission will be obtained from participants as to whether interviews can be audio-recorded.
- The principle of voluntary participation will guarantee the right of the participants to withdraw from the research at any time without any penalty. They may, for example, refuse to answer any question/s and be interviewed at reasonable times.
- The principle of informed consent means that the participants should at all times be fully informed about the research process and purposes, and first give their consent to participate. This will follow after an initial explanation of the research topic, the potential benefits and risks or harm involved. This however, remains a two-way dialogue and continuous process.
- The principle of safety requires that participants not be placed at risk or harm of any kind.
- The principle of privacy, incorporating the principle of confidentiality and anonymity, pseudonyms will be upheld. The identity of the participants as well as the information gathered will be kept anonymous and confidential.
- The principle of trust, especially in conducting interviews and other in-depth data collection methods, will allow trust gradually to develop. The researcher must be careful and sensitive in not exploiting this trust for personal gain or benefit, deceiving or betraying the participants in the research route or its published outcomes.

I envisage conducting this research after teacher-learner contact hours to minimise possible interruptions of teaching and learning, thereby respecting the culture of teaching and learning. It is my intention to share the research findings and recommendations after the completion of the PhD thesis with the participating teachers, the principals of participating schools, the districts and Gauteng Department of Education (GDE), after the data has been collected and analysed.

Should you have any queries about the proposed study, please contact me using the following details:

Elijah Krone Maema

Contact number: XXXXX

Email: [ekmaema@live.com](mailto:ekmaema@live.com)

Should you have any queries about me or the proposed study, please feel free to contact my supervisor at the University of South Africa using the following details:

Name: Dr Ramodugoane Tabane

Tel.: XXXXXX

Email: [tabanrj@unisa.ac.za](mailto:tabanrj@unisa.ac.za)

Yours sincerely

.....

Elijah Krone Maema

(PhD student)



## **APPENDIX G: INFORMATION SHEET FOR PRINCIPALS**

“Title: “Grade three teachers’ experiences of learners perceived to have ADHD in Soweto mainstream primary schools.”

My name is Elijah Krone Maema. I am currently conducting research under the supervision of Dr Ramodungoane Tabane a senior lecturer in the Department of Psychology of Education at the University of South Africa (Unisa) towards a PhD at the University of South Africa. We have funding from the University of South Africa Student Funding for accomplishing the research expectations and expenses. The school has been selected to participate in the study entitled “Exploring Grade 3 teachers’ experiences with learners perceived to have Attention Deficit Hyperactivity/impulsivity Disorder and intervention strategies applied in Soweto Mainstream Primary Schools.” The purpose of the study was to explore grade three teachers’ experiences of learners perceived to have ADHD in Soweto mainstream primary schools with the aim of harvesting intervention strategies (if any) employed in teaching learners perceived to have ADHD.

The study will also investigate classroom-based intervention strategies (if any) applied by Grade 3 teachers, and to determine the teachers’ influences on the academic and behavioural improvements of learners’ behaviours that mimic ADHD or those perceived to have ADHD during that developmental stage. Participating Grade 3 teachers will be observed as to how they deal with such learners during contact times, around school grounds and sports’ fields. Learners classroom behaviours will also be observed and how grade 3 teachers deal with such learners.

The study will sample a sum total of approximately 24 Grade 3 teachers from four Soweto mainstream primary schools with high grade 3 enrolment where ADHD is thought to be prevalent. It is hoped that the results will inform policy and improve the quality of the South African education system in the future on how to teach learners whose behaviours mimic ADHD or those perceived to have ADHD.

### **THE TEACHERS’ PARTICIPATION**

The researcher is asking you as a school principal to allow the researcher to collect information (data) from six or more Grade 3 teachers by means of interviewing them and observing how they deal with such learners in classroom settings. The

interviews will take 60 minutes after contact time and the observation will most probably last for the entire teaching and learning period. The researcher will need this information to contextualise Grade 3 teachers' ADHD experiences and understanding levels of ADHD as well as interventions strategies (if any) the Grade 3 teachers apply when teaching learners whose behaviours mimic ADHD or those perceived to have ADHD within the classroom. This will be done during observation of both the Grade 3 teachers and learners during contact times and outside of the teaching and learning settings. This will determine how these factors may affect the results of the study.

Please understand that the teachers' participation is voluntary and that they are not being forced to take part in this study. The choice of whether to participate or not, is theirs alone. If they choose not to participate, they will not be affected in any way whatsoever. If they agree to participate, they may withdraw from the study at any point, without fear or penalty.

### **CONFIDENTIALITY**

Any information provided by the participating teachers will be kept in a lockable cabinet or office of my supervisor at Unisa. It will not be available to others, and will be kept confidential to the extent possible by law. The data from participating Grade 3 teachers may be reviewed by my supervisor making certain that research is done properly. The supervisor will be required to keep participants' identity confidential. It is intended that results from the study be published with the participants' permission, in articles and other outputs. These outputs will once again not include any identifiable information to connect the participants or their schools to the study.

### **RISKS/DISCOMFORT**

The researcher does not see any risks in participants taking part. However, the participants may feel embarrassed and fear criticism about the management of the practice that they apply, their ADHD experiences and understanding levels and intervention skills that they apply. The researcher will undertake their and the schools' information remains confidential and anonymous, and for the purpose of the study only. The researcher will not share identifiable information with anyone other than the researcher's supervisor, especially not other Education Department officials at circuits, districts or provincial offices. Once the study is completed and

the researcher has received the PhD degree, all the information will be stored for a period of no less than five years. There after all data will be destroyed.

## **BENEFITS**

There are no material no financial benefits for agreeing to take part in this study. It is hoped that the findings will inform policymaker and benefit the education system to improve the quality of the South African education system for the future, particularly when teaching learners whose behaviours mimic ADHD or those perceived to have ADHD in township schools.

## **SHOULD YOU HAVE ANY QUESTION OR CONCERNS.**

This research has been approved by the University of South Africa (UNISA) and the Research Ethics Committee (please find insert copy of the clearance certificate).

If you have queries or concerns about the study, you may call the researcher,

Elijah K. Maema, XXXXXX or email at [ekmaema@live.com](mailto:ekmaema@live.com) or my supervisor, Dr Ramodungoane Tabane at XXXXXXXXXX or email at [tabanrj@unisa.ac.za](mailto:tabanrj@unisa.ac.za)

Yours thankfully

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Elijah Krone Maema

(PhD student)

## **APPENDIX H: INVITATION TO CONSIDER PARTICIPATING IN AN INTERVIEW**

Dear .....

This letter is an invitation to consider participating in a study I, Elijah Krone Maema am conducting as part of my research as doctoral student entitled “Title: “grade three teachers’ experiences of learners perceived to have ADHD in Soweto mainstream primary schools.” ” at the University of South Africa. Permission for the study has been given by the Gauteng Department of Basic Education (DBE) and the Ethics Committee of the College of Education, at UNISA. I have purposely identified you as a possible participant because of your valuable experience and expertise related to my research topic.

I would like to provide you with more information about this project and what your involvement would entail if you should agree to take part. The importance of the research topic is such that it might raise certain critical challenges experienced by classroom teachers and the types of interventions strategies applied in the teachers’ daily interactions with learners of various educational needs which might need considerations in education and to be well documented. In this interviews I would like to have your views and opinions on the topic. This information can be used to improve teachers’ understanding of teaching learners with various educational needs especially learners whose behaviours in classroom settings needs attention, for example learners with ADHD.

Your participation in this study is voluntary. It will involve an interview of approximately 60 minutes in length to take place in a mutually agreed upon location at a time convenient to you. You may decline to answer any of the interview questions if you so wish. Furthermore, you may decide to withdraw from the study at ant time without any consequences.

With your kind permission, the interview will be audio-recorded to facilitate collection of accurate information and later transcribed for analysis. Shortly after the transcription has been completed, the researcher will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or to clarify any points. All information you provide is considered completely confidential. Your name will not appear in any publication resulting from this study and any identifying information will be omitted from the report. However, with your

permission, anonymous quotations may be used. Data collected during this study will be retained on a password protected computer for a period not less than 5 years in my locked office or that of my supervisor.

The benefits of this study are that, they will raise awareness and understanding of this condition and afford the participating teachers opportunities to be able to apply appropriate intervention strategies when teaching learners who mimic ADHD. There are no known or anticipated risks to you as a participant in this study. You will not be reimbursed or receive any incentives of any kind for your participation in the research.

If you would like to be informed of the final research findings, please contact the researcher Elijah Krone Maema on xxxxx or [ekmaema@live.com](mailto:ekmaema@live.com)

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about your participation, please contact me at 082 456 8664 or by email at [ekmaema@live.com](mailto:ekmaema@live.com)

I look forward to speak to you and thank you in advance for your assistance in this project. If you accept my invitation to participate, I will request you to sign the consent form.

Your sincerely

---

Researcher's name (print)

---

Researcher's signature

---

Date

**APPENDIX I: CONSENT TO PARTICIPATE IN THIS STUDY (Return Slip)**

I, \_\_\_\_\_confirm that the person asking my consent to take part in this research has told me about the nature, procedures, and anticipated inconvenience of participation.

I have read the information sheet and it has been explained to me and I understood the study as detailed in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any given time without penalty (if applicable).

I am aware that the findings of this research study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the focus group, one-on-one interviews and observation as methods of data collection by the researcher.

I have received a signed copy of the informed consent agreement.

Participant's Name & Surname (Please print).....

.....

Participant's Signature

Date

Researcher's Name & Surname (Please print) .....

.....

Researcher's Signature

Date

## **APPENDIX J: FOCUS GROUP INTERVIEW SCHEDULE**

### **Introduction, purpose of the meeting and ethical measures revisited.**

1. How do you deal with learner(s) who are forever late to school and classroom and how do you handle such learners when they arrive late for their lessons for whatever reasons? Probe
2. Why is it that teachers request for the attention of the learners before starting with lessons? Probe.
3. When and how do you build rapport (explain the term if participants are not familiar with the term) with your learners? Probe.
4. Please describe the type of learner(s) in your class in terms of their conduct/behaviour, work-arrangement, organisational skills, etc. Probe.
5. Learners at that developmental stage and age should already be acquainted to school and classroom routines, so what is your reaction(s) to those who are still lacking behind in terms of school and classroom routines, how do you handle such learner(s)? Probe further.
6. Are there any disorders that you know off or have heard off?
7. Ever heard of a condition called ADHD? if yes, where and by whom?.
8. How would you perceive a learner(s) to have ADHD and what criterion would you use to look for signs/symptoms would you look at? Probe further.
9. Is there anyone of you who has experienced these signs/symptoms in your classroom and what did you do? Probe further.

## **APPENDIX K: SEMI-STRUCTURED INTERVIEWS**

### **Introduction, purpose of the meeting and ethical measures revisited**

1. From the previous focus group interviews, is there perhaps something that you would like to add that you might have forgotten.?
2. How often do you request for the attention of your learners before commencing with your lessons.? Probe.
3. What could be the reason(s) for the teachers to request for the attention of the learners during contact times? Probe.
4. How often do you ask learners to pay attention when giving lesson instructions? How do they respond and what is the reason for that? and how do you handle that situation.?
5. What methods do you apply to alleviate unacceptable behaviour of certain learners? Probe.
6. If disruptive learners continue, what steps do you take without disturbing the rest of the other busy learners? Probe.
7. Why is it that certain learners are unable to complete their tasks, they forget to write their home-works, lose things, are easily distracted and are constantly fighting other learners (Bullies)?
8. Think of a learner in your class who constantly shows inattentive and hyperactive/impulsive symptoms? Please describe this learner's behaviour(s) during teaching and learning times. Probe.
9. Describe how learner(s) who constantly disrupts others, and the disrupted learners report to you about the conduct/behaviour of that learner(s).? Probe.



**APPENDIX L: FOCUS GROUP CONSENT AND CONFIDENTIALITY AGREEMENT**

I, \_\_\_\_\_grant  
consent that the information I share during the focus group may be used by Elijah Krone Maema for research purposes. I am aware that the group discussions will be digitally recorded and grant my consent for these recordings, provided that my privacy will be protected. I undertake not to divulge any information that is shared in the group discussion to any person outside the group for whatever reason in order to maintain confidentiality.

Participant's Name (Please print): \_\_\_\_\_  
—

Participant's Signature: \_\_\_\_\_  
—

Date: \_\_\_\_\_  
—

Researcher's Name (Please print): \_\_\_\_\_  
—

Researcher's Signature: \_\_\_\_\_  
—

Date: \_\_\_\_\_

## APPENDIX M: ADHD-SPECIFIC KNOWLEDGE AND ATTITUDES OF TEACHERS (ASKAT) QUESTIONNAIRE

### Part A: Demographic Questionnaire

Please put an x next to the answer that is relevant to you.

1. Gender

Male ----- Female ----- Other -----

2. Age

20 – 25 ----- 26 – 30 ----- 31 – 35 ----- 36+ -----

3. Race

Black ----- White ----- Coloured ----- Other -----

4. Highest Qualification Completed

Diploma ----- Degree ----- Postgraduate Studies -----

5. Do you have a qualification on either Special Needs/Learner Support/Remedial Education?

Yes ----- No -----

6. How many years have you been teaching?

Less than 1 – 3yrs ----- 4 – 6yrs ----- 7 – 10yrs ----- 11+ yrs -----

7. Do you have learners in your class with or perceived to have ADHD?

Yes ----- No -----

8. Have you referred learners for an ADHD evaluation in the past year/s?

Yes ----- No -----

9. Have you received any training on ADHD?

Yes ----- No -----

10. If Yes, what kind of training (professional development) have you received? Please indicate.

A) Short courses

B) Teacher Workshops

C) Through formal studies (e.g. diploma, certificate, etc.)

- D) A and B
- E) A, B and C

11. Do you get any support from the District Based Support Team (DBST)?

Yes ----- No -----

12. If Yes, What kind of support?

- A) Teacher Workshops on ADHD
- B) Counselling for learners with ADHD
- C) Educational talks in parents' meetings about ADHD
- D) A and B
- E) A, B and C

13. Is there any support you are getting for learners with ADHD from outside sources?

- A) Private Educational Psychologist
- B) Non-governmental organisations (NGOs)
- C) University
- D) Community Based Organisations (CBOs)
- E) Local Hospital

**Part D: Open-ended Questions**

1. How would you describe learners who display hyperactive behaviours?

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## APPENDIX N: LANGUAGE EDITING CERTIFICATE

### **EDITING AND PROOFREADING CERTIFICATE**

7542 Galangal Street

Lotus Gardens

Pretoria

0008

20 April 2021

#### **TO WHOM IT MAY CONCERN**

This certificate serves to confirm that I have language edited Maema's dissertation entitled, **"Grade three teachers' experiences of learners perceived to have Attention Deficit Hyperactive Disorder in Soweto mainstream primary schools"**.

I found the work easy and intriguing to read. Much of my editing basically dealt with obstructionist technical aspects of language, which could have otherwise compromised smooth reading as well as the sense of the information being conveyed. I hope that the work will be found to be of an acceptable standard. I am a member of Professional Editors' Guild.

Hereunder are my contact details:



Jack Chokwe (Mr)

Contact numbers: 072 214 5489

[jackchokwe@gmail.com](mailto:jackchokwe@gmail.com)

Professional  
**EDITORS**  
Guild



Open Rubric