
**Classroom management of Attention-Deficit-Hyperactivity Disorder
(ADHD) in learners in the Foundation Phase in the Lejweleputswa
District**

by

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In the subject

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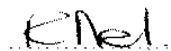
CENTRAL UNIVERSITY OF TECHNOLOGY

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DECLARATION

I declare that *Classroom management of Attention-Deficit-Hyperactivity Disorder (ADHD) in learners in the Foundation Phase in the Lejweleputswa District* 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.



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ABSTRACT

In keeping with international trends in education, South Africa has embraced inclusive education which makes provision for all diverse learners with learning barriers, such as Attention Deficit/Hyperactivity Disorder, to be educated and included in the mainstream classroom. ADHD is a common disorder known to be associated with behavioural and academic difficulties, creating challenges for both teachers and learners. Putting inclusive education into practice within diverse classrooms imply that teachers have to support and teach according to a variety of needs and preferences of learners, including learners with ADHD. I believe that teachers present one of the most valuable sources of information with regard to referral and diagnosis of the disorder. They are also responsible for creating an environment that is conducive to academic, social and emotional success for children with ADHD.

However, since some doubt exists as to whether teachers have the appropriate knowledge of ADHD and management skills to fulfill this important role, this research study has sought to examine and evaluate how the presence of learners with Attention Deficit Hyperactivity Disorder (ADHD) impacts upon the educational and behavioural climate of the mainstream classroom in the Foundation Phase in primary schools in the Lejwleputswa District. The study moreover addressed the knowledge levels of teachers and support systems in place at both institutional and departmental level.

Analysis of the information gathered through interviews revealed that ADHD learners have a predominantly negative impact on the mainstream classroom. The study found that teachers often hold negative beliefs regarding behaviour problems exhibited by ADHD learners, tend to be pessimistic about teaching these learners, and feel that they require extra time and effort to teach them. This could be attributed to a lack of knowledge and management skills of ADHD. Furthermore, it became evident that the majority of teachers view medication as the most effective treatment strategy. Recommendations for the DoE, teachers and further study were made.

Keywords: ADHD, Foundation Phase, Inclusive Education, hyperactivity, learning barriers, classroom management

ABBREVIATIONS

AD/HD	-	Attention Deficit with or without Hyperactivity Disorder
ADD	-	Attention Deficit Disorder
ADHD	-	Attention Deficit Hyperactivity Disorder
ADHD-C	-	Attention Deficit Hyperactivity Disorder – Combination
ADHD-HI	-	Attention Deficit Hyperactivity Disorder – Hyperactive and Impulsive
ADHD-I	-	Attention Deficit Hyperactivity Disorder – Inattentive
APA	-	American Psychiatric Association
CD	-	Conduct Disorder
CDCP	-	Centre for Disease Control and Prevention
		Differences
DoE	-	Department of Education
DSM-IV-TR	-	Diagnostic and Statistical Manual of Mental Disorders – IV-Text Revised, Fourth Edition
IDEA	-	The Individuals with Disabilities Education Act
INSET	-	In Service Education and Training
LD	-	Learning Disorder
MPH	-	Methylphenidate
NASET	-	National Association of Special Education Teachers
NIMH	-	National Institute of Mental Health
ODD	-	Oppositional Defiant Disorder
PRESET	-	Pre-service education and Training
RE	-	Remedial Education
SA	-	Subject Advisor
SAALED	-	South African Association for Learning and Education
SBST	-	School Based Support Team

SIAS - Screening Identification Assessment and Support

SMD - School Management Developer

UK - United Kingdom

CHAPTER 1

INTRODUCTION AND ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Attention-Deficit-Hyperactivity Disorder (also referred to as ADHD) is an increasingly common childhood behavioural disorder. ADHD is a complex disorder which is difficult to understand, but it is even more challenging to manage and treat. ADHD is referred to by a number of abbreviated labels such as ADD, ADHD-HI, ADHD, ADHD-I and ADHD-C, all of which often create confusion. According to research done by Mehl-Madrona (2000) it is estimated that approximately 3%- 5% of children progressing to primary schools are diagnosed with ADHD. According to the MayoClinic's website (<http://mayoclinic.com>) the cause of the disorder is not yet well understood. Unfortunately, parents often blame themselves when their child is diagnosed with ADHD, but scientists now believe that there is, amongst others, a genetic and neurobiological explanation for the disorder.

The educational challenges presented by ADHD in the classroom are extremely demanding. Although policy documents from the Department of Education (DoE) (*Education White Paper 6, 2001*) propose that learners with learning barriers such as ADHD should be accommodated in mainstream education, research suggests that South African teachers are not adequately equipped to manage ADHD learners in mainstream classrooms (Perold, Louw & Kleynhans, 2010).

1.2 BACKGROUND

Over the years extensive research has been conducted on identifying the different types of ADHD as well as the treatment thereof (Barkley, 1998; Flick, 1998; Fowler, 2002; Colberg, 2010; Ghanizadeh, 2010). Studies on the treatment of ADHD have been carried out predominantly in the medical field. Prescription drugs to treat the condition, such as Methylphenidate (e.g. Ritalin) and Dextroamphetamine (e.g. Dexdrine), have become very

popular, but some studies have raised concerns about the over-prescription of medication to young children. Doctors seem to diagnose children with ADHD without carrying out proper evaluations and medical examinations (Hartnett & Rinn, 2004).

I have been working in the field of tertiary education for approximately 15 years and have experienced the dramatic effect of ADHD on young adults. Furthermore, as a mother of an ADHD child, I have developed a limited understanding of the impact of ADHD on the child's life, both academically and psychologically. Over the years I witnessed the frustration levels of teachers dealing with ADHD learners in the classroom first hand which has prompted me to investigate the phenomenon further.

ADHD may pose major problems for the child as it may cause friction at school, hamper the academic performance of the child and interfere with peer relationships. Its negative effects and impact on the social and personal lives of sufferers cannot be overstated (Loughran, 2006). Most ADHD children develop emotional, social, academic and family problems, all of which emphasise the importance of the teacher's role in managing these learners. Parents of ADHD learners are desperately seeking for effective treatment (without adverse side-effects) and interventions and they often turn to teachers for help.

1.3 PROBLEM STATEMENT

During the preparation phase of this study I encountered many teachers who complained about learners who don't sit still, who don't follow instructions, who never seem to pay attention and who are continuously interrupting them during lessons. Sometimes these children are labelled as troublemakers who are difficult or ill-disciplined. However, it is possible that some of these learners may be suffering from ADHD, and uninformed teachers and parents may unwittingly cause emotional damage by labelling them in a derogatory manner.

Fowler (2002) and Colberg (2010) claim that teacher training institutions do not provide student teachers with the needed knowledge or skills to deal with ADHD in the classroom and many teachers are consequently unable to identify ADHD learners. The Department of

Education (*Education White Paper 6, 2001*) stipulates that all learners should have the opportunity to learn and they should get the essential support to do so. This document moreover refers to a number of issues pertaining to special education, such as the enabling of education structures and the changing of teaching methods to meet the needs of all learners with barriers to learning. *The Guidelines for Inclusive Learning Programmes* (DoE, 2005) provide guidelines for adapting the curriculum and lesson plans in this regard, but notably none of these documents offer specific information on the support of ADHD learners in the classroom. Furthermore, the Education White Paper 6 (2001) which aims to provide all teachers with sufficient information to implement Inclusive Education, has not been implemented sufficiently (Lebona, 2013). INSET (in-service education and training) by the DoE currently makes no provision for in-depth ADHD training of teachers. I firmly believe that, since a child spends a great deal of time with the teacher in the classroom, teachers play a vital role in the lives of ADHD learners - it follows that the relationship between ADHD learners and their teachers is crucial. ADHD children may easily interpret a negative attitude or even irritation on the part of the teacher as rejection.

Due to financial constraints and inclusive policies, it is commonly not possible to accommodate these children in separate classes or appoint specialist teachers who are trained to deal with ADHD. Similar to many other countries, learners with ADHD in South Africa are accommodated in mainstream education in accordance with an inclusive model. Currently teachers already face numerous challenges in their normal course of duty such as differences in personalities, behavioural problems and varying intellectual abilities of learners. The hyperactivity aspect of ADHD impacts adversely on the entire classroom environment. Other problems which the teacher may encounter include inattention, impulsivity, daydreaming and depression, all of which may cause frustration and disruption of teaching and learning. The educational realities in South African schools, such as overcrowded classrooms and inadequate facilities, complicate matters even further, making it extremely difficult for teachers to deal effectively with ADHD and disruptive behaviour in the classroom. ADHD learners do not cope well in large groups, and even worse in overcrowded groups (Ghanizadeh, 2010). It is likely that an already over-burdened teacher would have little time and energy in reserve to spend on an ADHD child.

In view of the above, the following research questions are formulated:

- What is the stance of the DoE on ADHD as reflected by its official documents, and how, according to their officials, are inclusive classroom strategies implemented?
- What are teachers' knowledge levels of ADHD?
- How do teachers deal with ADHD-related behaviour such as inattention, hyperactivity, impulsivity, daydreaming and depression?
- Which strategies can be implemented by teachers to effectively address the impact and effects of ADHD in their classrooms?
- What support systems are in place for teachers to deal effectively with learners diagnosed with ADHD?

1.4 RESEARCH AIMS AND OBJECTIVES

The overall aim of this study was to investigate the impact of ADHD on teaching and classroom management in Foundation Phase classes and to identify measures that can be implemented to address the associated challenges. This research focused on managing ADHD and the behavioural problems associated with ADHD in the classrooms of mainstream schools.

The specific objectives of the study were therefore:

- To determine the level of teachers' training and knowledge on Inclusive Education practices, with special reference to ADHD.
- To verify the stance of the DoE on Inclusive Education (including ADHD) as reflected by its official documents, and to ascertain how it is implemented, according to their officials.
- To determine how teachers deal with ADHD-related behaviour such as inattention, hyperactivity, impulsivity, daydreaming and depression.
- To establish which support systems are in place for teachers to deal effectively with learners diagnosed with ADHD.

- To provide recommendations on managing ADHD sufferers in the classroom and addressing their needs.

1.5 RESEARCH DESIGN AND METHODOLOGY

1.5.1 Design

The research design followed in this study was qualitative in nature with a preceding in-depth literature study to inform the nature and extent of the empirical investigation. This study was both of a qualitative and phenomenological nature. The study was qualitative as in-depth focus group interviews were held with five foundation phase teachers from five different primary schools in the Lejweleputswa Education District. In addition, the research was phenomenological in nature because I approached the phenomenon (Foundation Phase teachers dealing with ADHD learners) directly to make sense of their perspectives, feelings, thoughts, beliefs, ideals and actions in natural situations (McMillan & Schumacher 2010). It could also be considered hermeneutical (understanding and interpreting the experiences of the participants), naturalistic (giving a true reflection of the participants' situation) and constructivist (with the emphasis on the participant constructing the conceptualisations) (Babbi & Mouton 2002). Participants formed constructions to make sense of their world and reorganised these constructions as viewpoints, perceptions and belief systems. Their perceptions were what they considered real and which directed their actions, thoughts and feelings (McMillan & Schumacher 2010).

From an interpretivist perspective, the typical characteristics of the phenomenological method indicate that it strives toward a holistic understanding of how participants relate, interact with and make meaning of a phenomenon (Mc Millan & Schumacher, 2010). In the case of the present study, respondents gave a clear indication of their knowledge of ADHD and classroom practices they usually implement, as well as the difficulties they encounter in the process.

1.5.2 Data collection strategies

1.5.2.1 Literature study

I conducted an extensive literature study on the causes, characteristics and consequences of ADHD, including the management strategies currently employed in dealing with ADHD and its concurrent disruptive and aggressive behaviour in the classroom. Important sources of data were books, relevant journal articles, the White Paper 6 on Inclusive Education (2001) and subsequent policy guidelines published since 2001. The overarching aim of the in-depth literature study was to provide a solid theoretical framework against which the findings of the empirical research could be mirrored.

1.5.2.2 Interviews

An interview is a way of collecting qualitative data which essentially involves an in-depth discussion with one or more persons on a particular topic or set of issues (Cresswell, 2012:217). In this study I conducted *informal conversation focus group interviews* (McMillann & Schumacher, 2010). Interview topics are selected in advance for these kind of interviews, but the researcher determines the sequence and the wording of the questions during the interview and the tone is usually conversational and situational (McMillann & Schumacher, 2010). I conducted five suchlike interviews with Foundation Phase teachers of five pre-selected primary schools in the Lejweleputswa Education District. Focus group methodology is a way of collecting qualitative data which involves engagement of a small number of people in an informal group discussion (or discussions), 'focused' on a particular topic or set of issues (Cresswell, 2012:217). I used focus group interviews because they provided a way of collecting data relatively quickly from the research participants. They are more realistic (i.e. closer to everyday conversation) than an individual interview in that they typically include a range of communicative processes such as storytelling, joking, arguing, teasing, persuasion, challenge and disagreement. The disadvantages of focus group interviews are that the researcher has less control over proceedings, data is difficult to analyse, organise and recording is time consuming (Gay, Mills & Airasian, 2011). Focus

group interaction also allows respondents to react to and build upon the responses of other group members, creating a synergistic effect.

I also conducted a one-on-one interview with the Subject Advisor (SA) of the Early Childhood Phase of the Foundation Phase in the Lejweleputswa Education District. My aim was to get relevant input from a representative of the DoE who was specifically involved with the Foundation Phase at primary schools in the district. This also assisted me in the triangulation of my data, since the information and view from the SA was compared with, and interpreted against the background of the information offered by participants of the focus group interviews.

1.5.3 Quality criteria

Trustworthiness

According to Polsa (2013) the term trustworthiness refers to the way in which the inquirer is able to persuade the audience that the research is of high quality and that the findings of the study are significant. In this study I achieved this by employing member checking. After the data analysis was done and before findings were drawn, participants were furnished with interpreted results to verify the correctness of the interpretations.

Credibility

Credibility is a term that denotes how well the research describes a reality that seems to be true, plausible and persuasive (Polsa, 2013). I ensured credibility by allowing sufficient time to obtain data. This was invaluable in ensuring the detection of recurring patterns, themes and values (Cresswell, 2012). Structural coherence ensured that there were no unexplained inconsistencies between the data and the interpretation. This was achieved by ensuring that the interpretation of the data also explained apparent contradictions or conflicting opinions in the data. Sufficient descriptive data about the participants are provided (see Chapter 4).

1.5.4 Participants

I identified five primary schools by means of purposive sampling to participate in the study. Purposive sampling involves the researcher selecting what he/she thinks is a 'typical' sample (Walliman, 2001). De Vos (2005) explain that, in purposive sampling, the researcher should first think critically about the parameters of the population and choose the sample cases accordingly. In this study, I tried to include various types of schools (ex-model C, rural, private, English and Afrikaans) on different geographical locations to be as representative as possible. I made appointments with the principals, explained the purpose of the study and requested their permission to conduct the interviews. The principals personally arranged the time slots and venues for the interviews with the Foundation Phase teachers at their respective schools.

1.5.5 Data analysis

I immersed myself in the data in order to become familiar with the information. A content analysis was performed (see Chapter 3) and the data gathered from the focus group interviews were organised, transcribed, segmented and coded. From the various codes, themes and categories were established inductively to facilitate interpretation and presentation of the findings.

1.6 SIGNIFICANCE

This study was undertaken to gain a better understanding of the occurrence of ADHD in the classroom setting so as to provide teachers with the required knowledge and skills to deal with the condition in a positive and constructive way, consequently enhancing the cognitive processes and general development of the ADHD child. It is imperative that ADHD in mainstream classrooms are managed effectively to pursue a high level of development and achievement in the classroom. Due to the fact that there is currently no official policy which regulates how teachers should deal with ADHD in their classrooms, this study may serve as a guide for many frustrated teachers.

1.7 ETHICAL CONSIDERATIONS

The following ethical measures were considered during the research:

1.7.1 Professional ethics

According to Creswell (2012) professional ethics refers to the moral commitment that scientists are required to make to acquire objective and accurate data about real phenomena. This research was conducted ethically for the following reasons:

- I endeavoured to be objective in reviewing literature and obtaining data.
- I attempted to refrain from falsification and/or fabrication of data.
- I described the methodology used to obtain data in detail.

1.7.2 Publishing ethics

According to McMillan and Schumacher (2010) one of the key ethical principles of scientific publication is that sources must be acknowledged. This research was conducted in compliance with publishing ethics:

- The work of all authors used in this study was acknowledged in a list of references.
- All other written work is free from plagiarism and flowed from my pen.

1.7.3 Accountability

The research and its results were conducted in an open and transparent manner and the results will be accessible. This was achieved in the following manner:

- Full permission from the Free State Department of Education was gained to conduct the research at selected primary schools in the Lejweleputswa Education District (see Appendix B).

- Research results will be open and available to all.

1.7.4 Relationship with respondents

Respondents have the right to privacy and anonymity at all times. McMillan and Schumacher (2010) explain privacy and anonymity as the individual's right to decide when, where, to whom and to what extent his or her attitudes, beliefs, and behaviour will be revealed. The following measures were taken in this study:

- I respected the anonymity and privacy of participants at all times. Participants had the right to have their viewpoints expressed.
- I explained the rationale of the research project to participants at the beginning of each focus group interview as well as individual interview.

1.7.5 Publication of results

The findings of the study will be introduced to the reading public in written form to be of value and to be viewed as research (De Vos , 2005):

- The report written as a result of this investigation is clear and unambiguous to ensure that whoever uses it, can rely on it.
- A shortened version of this research will be submitted as a journal article to an accredited publisher.

1.8 LIMITATIONS AND CHALLENGES

This study is limited to the Free State Province, specifically the Lejweleputswa district. Education departments within other provinces may have policies regarding classroom management of ADHD learners. This implies that the findings of this study may not be applicable to schools in other provinces in South Africa. The results of this study may thus not be generalised.

1.9 EXPECTED OUTCOMES

My aim with this study was to make a useful contribution towards the identification and management of ADHD in the classroom situation. To this end, the study aimed at determining to what extent the teachers' training, PRESET as well as INSET, prepared them to deal with ADHD in the classroom. The support given to teachers by the DoE was additionally investigated and evaluated. I endeavoured to supply the teachers with guidelines which would assist them in identifying ADHD learners in their classrooms, and additionally suggested ways to adapt their classroom practices to accommodate them.

1.10 PROGRAMME OF STUDY

Chapter 1 indicated the scope of the study. It includes the introduction, problem statement (including research questions), aims and objectives of the study.

Chapter 2 comprises a literature study. It deals with the different aspects of ADHD as well as teachers' current knowledge, management skills and techniques with regard to ADHD.

Chapter 3 deals with the research design and methodology. The qualitative design, research method, data collecting instruments and techniques as well as the population and sampling techniques used, are discussed.

Chapter 4 focuses on data analysis and the results of the research.

In Chapter 5 the research findings are summarised and some recommendations are put forth.

CHAPTER 2

LITERATURE REVIEW: EXPLORING ADHD IN THE FOUNDATION PHASE IN SOUTH AFRICAN SCHOOLS

2.1 INTRODUCTION

ADHD has been described in the medical literature for about one hundred years. According to Colberg (2010) the first sighting of ADHD in literature was in a poem by Heinrich Hoffman in 1865 when he wrote about “Fidgety Philip as one who won’t sit still, wriggles, giggles, swing backward and forwards, tilts up his chair growing rude and wild.”

According to Harisarsad (2010) an English pediatrician, Dr George Still, studied and described a group of children who were hyperactive, inattentive and impulsive during 1902. He described them as being defiant, exceedingly emotional and resistant to discipline. These children had problems with inattention and were unable to learn in school (Colberg, 2010). At the time ADHD was not yet considered to be a medical disorder and these children were labeled as “morally defective”. Many of the determining characteristics identified and described by Still are still valid today.

Most children experience times when they find it difficult to pay attention, act without thinking or become overactive. What separates individuals with this disorder from the average child, however, is the degree to which they have difficulties in the aforementioned areas and how it influences all aspects of their lives. According to Papalia and Feldman (2011) 2.5 million children in the United States were diagnosed with ADHD during 2006. While the rate of diagnoses of general learning disorders remained relatively constant, the rate of ADHD has increased by about 3 % per year over the past 10 years.

Dedram (2006) points out that ADHD is a serious societal problem which often causes sufferers to be unpopular with teachers and other learners at schools. They are consequently labelled as “naughty” or “disobedient” and are often misunderstood. Furthermore, the demands on teachers become more pressing when dealing with these

learners as their inability to concentrate, their lack of impulse control and their hyperactivity interfere with classroom activities (Holz & Lessing, 2002; Kleynhans, 2005).

2.2 ADHD EXPLAINED

Attention deficit hyperactivity disorder (ADHD) is a term widely used to diagnose individuals who display a wide range of symptoms such as an inability to concentrate, hyperactivity, anger outbursts, emotional instability, inability to complete a task and impulsivity (American Psychiatric Association (APA), 2000).

The current edition of the Diagnostic and Statistical Manual of Mental Disorders (Revised, Fourth Edition (DSM-IV-TR) regards ADHD as a developmental and behavioural disorder that usually appears and is identified during childhood (Kos, 2004). Over the years, the diagnostic criteria for ADHD have undergone several transformations, ranging from changes in conceptual emphasis to changes in how the symptoms are listed. Despite the large body of literature on ADHD, the core neuropsychological impairments in ADHD have not been fully resolved (Doyle, 2006). According to Lougy, DeRuvo & Rosenthal (2007) ADHD is currently recognised as a disorder with behavioural, emotional, educational and cognitive aspects which manifest daily (to some degree) in a child with ADHD. The American Psychiatry Association Diagnostic and Statistical Manual for Mental Disorders (2000) (DSM-IV-TR-IV) states that the essential feature of ADHD is a persistent pattern of hyperactivity-impulsivity and/or inattention that is more frequent and severe than what is typically observed in children at the same developmental level.

According to Kendal, Wagner and Ruane (2011) South African statistics of ADHD indicate that 3% - 6% of the general child population is diagnosed with some type of ADHD. This implies that a teacher will probably have at least one child diagnosed with ADHD in her classroom at a given time.

2.3 TYPES AND CHARACTERISTICS

Symptoms or characteristics of ADHD can be primary or secondary in nature and teachers must be equipped to identify this learning disorder in learners to be able to help them.

Inattention and impulse control seem to be more dominant factors than hyperactivity. ADHD complicates the child's ability to control her spontaneous responses which may range from movement to speech and inattentiveness. Loe and Fieldman (2006) argue that children suffering from ADHD-I are quieter, lethargic, slow moving, daydreaming and they may seem confused at times, especially in a classroom situation. Children suffering from ADHD-C will demonstrate an inability to self-inhibit. They are noisy and would cause distractions in the classroom. They are impulsive, active, outgoing, sometimes aggressive and very much aware of what is happening around them.

Baker (2005:12) explains that the ADHD learner may be inconsistent in the way in which he responds to a situation. ADHD learners often appear inattentive when the teacher speaks to them, due to the high levels of distractibility which results in the focus of their attention jumping from one stimulus to another (Root & Resnick, 2003). They struggle to finish tasks, tend to daydream and sometimes have difficulty working independently. In general, learners with ADHD might be irritable and explosive. They may also display aggressiveness and uncontrollable outbursts (Sadock & Sadock, 2007) which may greatly challenge teachers in terms of classroom management and discipline.

Without sufficient knowledge of the characteristics of ADHD, a teacher who is dealing with these children will not be aware of the behavioural patterns that fit into the profile of ADHD. It is important, however, to remember that all the characteristics of ADHD are generalisations of symptoms which many ADHD learners may display. Each learner/child is different and may display slightly different characteristics or combinations of characteristics.

Kos (2004) explains that during the 1950's neither hyperactivity, nor inattentiveness were included as diagnostic criteria for ADHD in the first edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association) DSM (APA, 1952). The

second edition of the DSM, however, used the term *Hyperkinetic Reaction of Childhood* to describe children who exhibited patterns of extreme overactivity or hyperactivity (APA, 1968). The DSMIII introduced the label *Attention Deficit Disorder* (APA, 1980) and initiated the first move towards realising that behavioural difficulties imply more than mere difficulties with hyperactivity and difficulty to learn.

Initially ADHD was referred to only as ADD (excluding the 'H' which indicates "hyperactivity"), but researchers have identified different types or categories of "attention deficiency". The terminology of Attention Deficit Disorder (ADD) has developed as this disorder is now believed to have two distinct components, namely inattentiveness and hyperactivity. Some medical and therapy professionals continue to use the term ADD for children who are predominantly inattentive and ADHD for children who are also hyperactive.

Although inattention, hyperactivity and impulsivity are the main characteristics of ADHD, all do not have to be present in a learner to be diagnosed with the learning disorder. For example, a learner with hyperactive and impulsive symptoms, but without attention difficulties, might be diagnosed with ADHD. These learners are often diagnosed during the foundation phase in education when teachers are usually alerted by typical ADHD behaviours. In keeping with these findings, Lopes (2008) states that often individuals other than family members identify ADHD related behaviour in children.

The American Psychiatric Association recognises three types of children with ADHD: children who are predominantly inattentive, children who are predominantly hyperactive and impulsive and children who exhibit a combination of all three behaviours. Each of these three types is distinguished by the number of criteria which should be met in order to be identified as a particular type of inattention or hyperactivity-impulsivity respectively (Baker, 2005). (The criteria for each type are described in Appendix A).

According to Greeff (2005) establishing a diagnosis of ADHD requires a specific strategy that limits both over-identification and under-identification. For a child to be diagnosed with ADHD, the symptoms have to appear before the age of seven and the symptoms should be

displayed in multiple areas, such as at school, at home and at play. The symptoms must also be displayed persistently over an extended period of time. The behaviour of the child should adversely affect the child's functioning at school and in a social environment (Greeff, 2005).

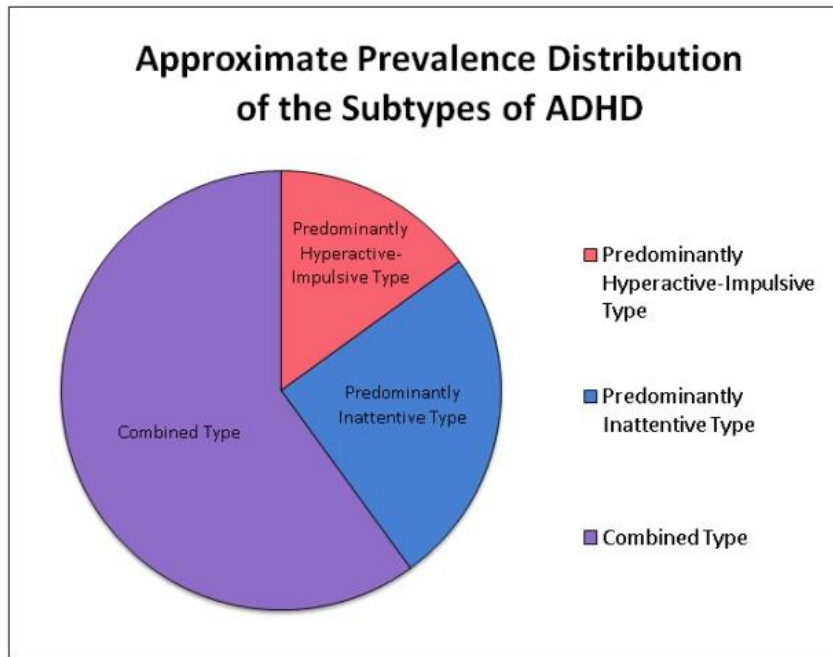


Figure 2.1 Distribution of the subtypes of ADHD

2.3.1 ADHD predominantly inattentive

(a) *Inattention*

Attention *per se* has many components. The ADHD learner struggles with both sustained attention and selective attention. Inattention occurs when a learner finds it difficult to pay attention to the details of tasks or activities, when he is forgetful and easily gets distracted from a task, and when he struggles to listen to full instructions (Harisarsad, 2010). Baker (2005) points out that ADHD learners cannot pay sustained attention because they cannot stay task-orientated. They also struggle with tasks requiring selective attention as they cannot differentiate between essential and non-essential information. This results in the child paying attention to *all* incoming information, including external noise and movement.

2.3.2 ADHD predominantly hyperactive and impulsive

(a) *Hyperactivity*

Hyperactivity indicates that the individual is extremely overactive. Behaviours indicative of hyperactivity include having difficulty staying seated and being constantly on the move (Kos, 2004:20). Harisparsad (2010) explains that hyperactivity occurs when learners cannot sit still, when they constantly move around and run in the classroom, when they fidget and squirm excessively, when they talk more than other children their age and when they cannot wait for their turn. Most frequently hyperactivity does not occur without impulsivity (Delfos, 2004). The ADHD learner cannot process many stimuli at one time. This leads to a limited processing of stimuli which causes the learner to move from one stimulus to another, because processing of two stimuli at the same time presents problems. Therefore, a stimulus which presents itself to the learner at a specific moment will capture his attention. Accordingly, the ADHD learner will lose focus and even stop and consequently leave the current activity in which he was engaged, incomplete. For example, whilst busy with a reading assignment the learner will suddenly raise his hand and ask the teacher a question not related to the topic. Before the teacher is able to reply the idea of playing a game during break with another child comes to mind, which he then proceeds to do (Delfos, 2004). This kind of behaviour often results in these learners being labelled negatively and rejected by their peers, teachers and parents (Moeller, 2001).

In conclusion, it appears that hyperactivity is characterised by continual unrest which generally occurs in all situations faced by the ADHD learner. Although hyperactivity is not imperative for an ADHD diagnosis, it is commonly found in learners diagnosed with this disorder.

(b) *Impulsivity*

Impulsivity is another core characteristic of ADHD which moreover is closely related to hyperactivity. Impulsivity refers to a general lack of self-control. It may be exhibited by a child being impatient, interrupting their peers' conversations and blurting out answers

before questions have been fully verbalised. According to Baker (2005) learners with ADHD have a tendency to be socially inept and they may experience difficulties with rule-governed behaviour. Impulsivity may sometimes result in aggressive behaviour such as a learner hitting his peers impulsively.

2.3.3 ADHD combined

This is a combination of the above-mentioned types. The learner will display all three main characteristics of ADHD. As a result of the main characteristics which determine the types, this disorder is commonly called Attention Deficit with or without Hyperactivity Disorder (AD/HD). According to Picton (2002) it is important to understand the distinction between the different types as there are many learners who display inattentiveness without hyperactivity, which can be overlooked when teaching them.

2.4 CAUSES OF ADHD

No one knows exactly what causes ADHD. Perold, Louw and Kleynhans (2010) mention that no conclusive evidence exists regarding a singular cause for ADHD, but research indicates that the condition is likely to be caused by a combination of factors. It is widely accepted that ADHD has no single, specific cause (Baker, 2005). For the purpose of this research, I shall focus on the medical, educational and environmental factors that cause ADHD.

2.4.1 Medical Factors

Medical factors include genetic, neurological and biochemical factors.

2.4.1.1 Genetic factors

According to Cook (2005), also confirmed by the National Institute of Mental Health (NIMH) (2012), genetic and brain imaging studies indicate that ADHD is a brain disorder, and it is therefore not caused by parenting skills or other environmental factors. Researchers agree that genetics seem to be a factor as it runs in families with heritability estimates ranging

from 0.55 to 0.92. Some studies suggest that learners whose parents have been diagnosed with ADHD, may be more likely to develop ADHD than other children. On average, there is a 50% chance that one of the ADHD learners' parents will also have the disorder. Levy, McStephen and Hay (2001) conducted twin studies during 2001 which supported the fact that ADHD comprises of a genetic etiological component. Despite extensive medical research that has been conducted, I could not find any research evidence linking a specific gene to the disorder.

2.4.1.2 Neurological Factors

According to Hariparsad (2010) neurological dysfunction may be a cause for ADHD. This is also confirmed by the NIMH (2012). Research suggests that neurological abnormalities, such as ADHD, as well as restricted dysfunction of the brain may lead to aggression (Gosalakkal, 2003). Children who experience inefficient transmission of neurological impulses (which affects the entire brain system) may suffer from ADHD. Hariparsad (2010) points out that allergens may also cause ADHD because an allergic reaction causes a chemical imbalance in the brain. Many researchers suspect that ADHD is a result of communication between neurons in the brain. Studies reveal that the brain physiology and biochemistry of people with ADHD differ from that of people without ADHD (Bentham, 2011). According to Kern (2008) many researchers argue that behaviours characterised as ADHD are the result of a neurological malfunction in the brain. Research further shows that the neurological functioning of ADHD affects adaptation, contributes to underachievement and has a large impact on the learner's academical development (Kleynhans, 2005). During a study conducted by DuPaul and Stoner (2003) it was found that some teachers held the view that children will 'outgrow' their symptoms by adolescence. This view may imply that the seriousness of the disorder is sometimes understated. When adolescents with ADHD are compared with non-ADHD children, those with ADHD are at higher risk for academic failure, school suspension, and dropping out of school (Perold, et al., 2010).

2.4.1.3 Biochemical Factors

According to Barkley (1998) and corroborated by Jimmerson (2002), the potentially causative factors associated with ADHD which have received the most research support are biological in nature; in other words, they are known to be related to or have a direct effect on the brain's development and/or functioning. All of us have unique biochemical factors which influence our behaviour, mental health, personality, etc. As Pello and Solomon (2011) point out, the biochemical etiology of ADHD is related to low levels of catecholamines and serotonin in certain areas of the brain. Giorcelli (in Kern, 2008) proposes that ADHD is a neurobiological disorder which is a result of imbalances in brain chemistry and is associated with disparities in the neurotransmitters that regulate behaviour.

2.4.2 Environmental factors

Various factors such as psychosocial practices and dietary intolerances have been shown to exacerbate ADHD symptoms, but they have not been proven to cause ADHD (Levy et al., 2001). Kern (2008) mentions that studies done by the National Association of Special Education Teachers (NASSET) show a possible link between the use of cigarettes during pregnancy and a resultant risk of ADHD in the new-born. Another environmental factor which is associated with ADHD is explained by Mowbray (2003) as a condition thought to be triggered by the relationship between the child's biology and the environment. Research by Pfiffner, McBurnett, Lahey, Loeber, Green, Frick, and Rathouz (in Jimmerson, 2002) suggest that the type of child psychopathology which accompanies ADHD is predicted concomitant with the same type of parental psychopathology. This is also confirmed by Sadock and Sadock (2007) when they point out that emotional disturbances and stressful events contribute to the onset of ADHD. This view is supported by Swart and Pettipher (2005) who argue that humans do not exist in isolation; they are jointly influenced and moulded by the societies they inhabit. White (in Jimmerson, 2002) is of the opinion that the parent-child relationship may be viewed through a transactional lens as a continuous, mutual transaction. For example, raising a child with ADHD may continuously put stress on the parent and therefore affect the quality of the parent-child relationship, which may

potentially bear on the child's behaviour. One may thus conclude that environmental factors may contribute to the aggravation of ADHD symptoms.

2.4.3 Educational factors

Swart and Pettipher (2005) report that the relations between people as individuals and the various systems wherein they operate can enhance or hamper their development (see 2.10.5). Shaffer and Kipp (2010) define ADHD as an attention disorder which involves distractibility, hyperactivity and impulsive behaviour that often leads to academic difficulties, poor self-esteem and social or emotional problems. This viewpoint is also supported by Jimmerson (2002) who reports empirical evidence suggesting that the likelihood for children and adolescents with ADHD to engage in risky behaviour is higher than that of their non-ADHD peers. Glass and Wegar (in Kern, 2008) argue that if the school and home system were to be scrutinized, we might find that the behaviour of the child is symptomatic of a school or home situation rather than being a neurological disorder. Jimmerson (2002) states that the transactional model can be used in the domain of psychosocial contributors to explain the interacting effects of the individual with ADHD and the educational context. The fundamental assumption of the transactional model is that development is facilitated by a bidirectional interaction between the learner and his environment. At the core of this model is the implication that behaviour is always a product of the learner's developmental history and current circumstances. A change in the learner may trigger a change in the environment, which in turn affects the learner, and so on. In this way, both the learner and the environment can change gradually and affect each other in a reciprocal fashion (Warren & Yoder, 1998). In keeping with these findings Jimmerson (2000) states that early developmental history is important to the development of the learner, not only because it influences later outcomes, but because of what the learner takes forward from these experiences as a result of transactions with the environment.

While this model may not explain the underlying causes of ADHD, it does offer explanations as to how the individual and the educational environment affect one another in an equal manner. Consequently, throughout the learner's growth and development over time, his ADHD symptoms may fluctuate depending on the school and classroom environment and

his interactions with it. What can be derived from this is that if the teacher does not meet the learner's needs, there will not be proper brain stimulation which may subsequently hamper the development of the ADHD learner.

2.5 PREVALENCE OF ADHD

Knowledge about the occurrence of ADHD will help the teacher to see it in perspective. ADHD is one of the most common childhood learning disorders. According to Holtz and Lessing (2002) ADHD affects millions of learners worldwide, but the percentage of individuals with ADHD is not conclusive at this stage. Hariparsad (2010) estimates that ADHD affects 3-5 % of diagnosed children in South Africa. This is approximately 1 child in every classroom. Although the DSM-IV (1994) cites a prevalence rate of 3-5% of school age children, methodological issues in different research projects as well as the evolving dynamics of the disorder have led to varying prevalence estimates, ranging from approximately one percent to nearly 20 % of school age children. The Attention Deficit and Hyperactivity Support Group of Southern Africa presents figures which indicate higher prevalence rates. According to their most recent data, approximately 8-10 % of the South African population suffer from ADHD, and it is not limited to children only. Relatively recent studies indicate that the prevalence rates of ADHD have increased significantly over the past few years (Colberg, 2010).

ADHD occurs worldwide and variations in available statistics for the prevalence of the condition may be due to differences in cultural perceptions and expectations. In the USA statistics similar to the above are reported. Parents indicate that almost one in 10 children and teens in the United States have been diagnosed with the condition at some point. The Centre for Disease Control and Prevention (CDCP, 2010) conducted a nationwide survey during 2009 in the USA and their analysis found that rates of parent-reported ADHD increased from 7.8% in 2003 to 9.5% in 2007, which indicates a 21.8% increase. In keeping with these findings Pellow and Solomon (2011) also point out that ADHD affects up to 1 in 10 children in the United States. Many possible risk factors in the development of ADHD may be heterogeneous and diverse and have been identified as underlying etiologies of ADHD.

As mentioned earlier, the reported prevalence of ADHD differs substantially across studies, but there is a general consensus that between 3-5 % of children are diagnosed with ADHD. ADHD is usually diagnosed in children of school age across cultures and geographical regions. The signs or symptoms normally appear before the age of 7 and boys are more prone to the condition by a 3:1 margin (Kidd, 2000).

2.5.1 Gender

Prevalence rates of ADHD differ across the genders and boys seem more likely to be diagnosed with ADHD.

Patricia and Pastor (2010) believe that boys (6.7%) are more than twice as likely as girls (2.5%) to suffer from ADHD. On top of this, boys (5.1%) are twice as likely as girls (2.3%) to have both ADHD and LD (learning difficulty). It is possible that boys are naturally more hyperactive than girls and are therefore referred to health care professionals more frequently. Girls, on the other hand, tend to experience more difficulties with inattention than boys (Kos, 2004). These difficulties found in girls are far less observable than difficulties with overactivity, impulsivity, and possibly aggression. Similarly, the National Institute of Mental Health (NIMH) attributes this to the fact that the condition often presents itself differently in boys and girls. For example, boys with ADHD are more likely to display disruptive behaviour which draws attention and is recognised easier, while girls with ADHD may simply appear passive or unmotivated. Boys who have ADHD are often labelled as learners with "discipline problems."

2.5.2 Age

Statistics reveal that the prevalence of diagnosed ADHD children is between the ages of 6 - 17 years, with or without learning difficulties (Kos, 2004; Patricia & Pastor, 2010; Harisarsad, 2010). According to Harisarsad (2010) older children between the ages of 12-17 are more likely to be diagnosed with both ADHD and LD than younger children between the ages of 6-11 years. Although many children diagnosed with ADHD experience a

reduction in symptoms during adolescence and adulthood, only a few become symptom free. Many ADHD sufferers continue to have problems including following conversations, forgetting assignments and birthdays, being disorganised, switching jobs often and having poor relationships. Often more secondary problems like low self-esteem, anxiety and depression start to manifest during adolescence and adulthood.

2.5.3 Race and ethnicity

ADHD knows no boundaries as many researchers found that it occurs in all cultures. Prevalence rates may vary both within and across cultures. According to a study conducted by Colberg (2010) the occurrence of diagnosed ADHD is higher in Western cultures. Accordingly, the treatment diagnosis for ADHD in South Africa is lower for black children than for white children. (1.7% versus 4.4% in 2005) (Hariparsad, 2010). Cross-culturally, there are very few children diagnosed with ADHD in Japan, France and Germany, while the rate of American children diagnosed with ADHD is much higher than children from elsewhere in the world (Kos, 2004).

2.5.4 Health conditions

The health of a child is another important factor in ADHD. Children who are either in a fair or poor health condition are more likely to be diagnosed with ADHD than children in good health. According to statistics, 19 % of boys and 7 % of girls who are in fair or poor health are diagnosed with ADHD (Colberg, 2010). Children with ADHD are also likely to have chronic health conditions, such as asthma. ADHD is also more prevalent in children with mental retardation and other developmental delays. The birth weight of an infant can be a significant factor in a child's diagnosis of ADHD (Colberg, 2010). ADHD in children with a low birth weight are diagnosed at 11.7 % while children with a higher birth weight are diagnosed at a lower 8.8%.

2.6. TREATMENT (also see 2.10)

Acknowledging the aetiology of ADHD facilitates acceptance of the disorder and promotes willingness to consider various interventions.

Nichy (in Kern, 2008:22) indicates that there is no quick or instant treatment for ADHD. He suggests that ADHD related behaviours can be managed through the use of an educational programme as well as medication that fits the child's specific needs. According to DuPaul and White (2006) the following intervention methods should be considered:

- Medical Interventions, which are central nervous system stimulants
- Behavioural Interventions
- Academic Interventions

These interventions are by no means exhaustive or definitive and simply reflect some of the interventions I have reviewed.

2.6.1 Medical interventions

Medical interventions usually involve the use of central nervous system stimulants which may include "...methylphenidate (MPH) in a variety of immediate, intermediate, and extended release formulas (Ritalin, Metadata, Methylin, Concerta), a formulation of MPH consisting of only the more active d-isomer (focalin), dextroamphetamine (fexedrine), and mixed isomers of amphetamine (Adderall, Adderall XR)." (Miller-Horn, Kaleyias, Valencia, Melvin, et al, 2008:6). Treating ADHD children with stimulant medication does provide beneficial results even though medicinal treatment of ADHD is a controversial and emotional issue. Greeff (2005) argues that the use of stimulant drugs results in an immediate and often dramatic improvement in behaviours such as attentiveness and interpersonal interaction.

Bentham (2011) explains that psychostimulants, such as Ritalin (methylphenidate), have been found to improve both attention span and impulse control. These types of

medications decrease incidences of hyperactivity in 70 – 90% of children with ADHD. Psychostimulants have been used for over 50 years and were found to be helpful in approximately 70% of children with ADHD (Venter, 2006). Kern (2008:23) postulates that research into the efficacy of stimulant medication found that between 70% and 90% of learners treated with these medications responded positively, while the remainder of the learners either displayed no response or their ADHD symptoms worsened.

Non-stimulant medication such as Strattera (atomoxetine) is a new category of medication for the treatment of ADHD. Atomoxetine is not a controlled substance and is classified as a non-stimulant under the Controlled Substances Act (Greef, 2005). Scientists believe that Atomoxetine blocks the reabsorption of noradrenaline, a neurotransmitter which is considered to be important in regulating attention, activity levels and impulsivity. Other medications that have proven to decrease hyperactivity, impulsivity and aggression include certain anti-depressants and anti-hypertensives (De Jager, 2004).

Although some researchers suggest that ADHD may be underdiagnosed, physicians warn that it may be over-diagnosed. This results in unnecessary overmedication of children whose teachers and parents do not have sufficient knowledge of coping strategies (Papalia & Feldman, 2011). It is therefore important for families to consider both the advantages and disadvantages of using medication to treat ADHD symptoms.

Teachers who deal with ADHD learners should be aware of the pharmacological functioning of the specific medication the child is taking. Ritalin, for example, is a short-acting medication and multiple dosages should be given. Ritalin starts to work in approximately thirty to forty minutes with maximum effectiveness occurring after an hour and a half. The fact that it starts to wear off after four hours is of vital importance to the teacher. If the dosage and time of consumption is not correct, a condition called 'rebound hyperactivity' could occur (Doyle, 2006). This implies that when the medication starts to wear off, the child becomes even more hyperactive than before taking the medication. If the teacher notices this behaviour, he needs to inform the parents as the dosage may have to be adjusted.

2.6.2 Behavioural interventions

Behavioural interventions focus on the learner's thinking processes and aim to encourage ADHD learners to use problem-solving and other appropriate strategies while simultaneously weighing up the consequences of their actions. These behavioural interventions are also referred to as cognitive behavioural therapy which can be divided into two distinct categories. The first refers to changing antecedent events which focus on changing the behaviour of the learner prior to a specific behaviour. Kern (2008) suggests that teachers should include posting rules, modifying assignments and peer tutoring in their classroom management strategies as part of behavioural interventions. One of the areas that they should focus on is seating. Grandy and McLaughlin (in Kern 2008) suggest placing a child with ADHD near the teacher or teacher assistant so that he can receive additional support from the teacher. Physical activities to help the learners deal with their activity levels can also be beneficial forms of treatment (Thompson & Rudolph, 2000).

The second behavioural intervention refers to consequential events which employ both positive and negative consequences for a specific behaviour, such as star charts, time out and privileges.

2.6.3 Academic interventions

Academic interventions refer to offering academic support to learners diagnosed with ADHD, such as peer tutoring and individualised direct instruction (DuPaul & White, 2006). Lovey (in McClintock, 2002) advises that the ADHD learner should be viewed in the same light as any learner with special educational needs. Classroom observation is considered to be the most important means of establishing the main area of concern. Grandy and McLaughlin (in Kern, 2008:79) also noted that "...on-task behaviour, activity level and academic performance..." improved in learners suffering from ADHD as a result of peer tutoring.

For the purpose of this study the above strategies will be explained in more detail in section 2.7

Serious consequences may develop for ADHD learners who receive no treatment or inadequate treatment. These consequences may include low self-esteem, academic failure and a possible increase in the risk of antisocial and criminal behaviour (De Jager, 2004). ADHD which is not treated by professionals can be detrimental to the learner's academic and social development, as it interferes with the child's ability to concentrate and learn. Despite the various treatment methods, studies have shown that teachers prefer medication as an intervention strategy since they regard it to be more effective and instantaneous (Curtis, Pisecco, Hamilton & Moore, 2006; Kern, 2008).

De Jager (2004) postulates that no long-term assessments have been conducted to report the outcomes or the value of the various treatments for ADHD related behaviours. A wide variety of opinions exist amongst practitioners, therapists and teachers regarding the successful treatment of ADHD.

2.7 ADHD IN THE EDUCATIONAL CONTEXT

2.7.1 The learner and ADHD in the classroom

The classroom may present one of the most difficult places for learners with ADHD to cope, most probably due to the fact that this setting requires learners to engage in behaviour which conflicts with the core characteristics of ADHD (Kos, 2004).

ADHD manifestations may contribute to the learner experiencing difficulty to adapt to the more formal academic environment (Holtz & Lessing, 2002). A typical classroom setting requires of the child to sit still, listen to the teacher, pay attention, follow instructions and concentrate on tasks (Perold et al., 2010). ADHD learners do not take a conscious decision to disregard these – their brains simply would not allow them to oblige. Learners in lower grades typically have a great desire to please their teacher. One can imagine the disappointment these learners experience each time they fail to do so.

The inclusive classroom should foster tolerance, acceptance and caring for all learners. The teacher has the responsibility to create and maintain a classroom atmosphere which nurtures the personal, social and cognitive development of all learners, including ADHD learners. In this regard Geng (2011) points out that, should teachers have a positive attitude towards ADHD learners and they believe and act as if all their learners will be successful, these children will live up to those expectations.

2.7.1.1 The influence of ADHD on the learner in the classroom

Learners with ADHD plainly do not have the ability and persistence to engage in and complete tasks which other learners their age are able to carry out (Essa, 2008). Much research has been conducted involving learners' behaviour and academic development problems within the educational setting. Kos (2004) contends that learners with ADHD often experience a myriad of difficulties at school which are related to the core symptoms of the disorder, such as inattention, impulsivity, and overactivity.

The biggest challenge for ADHD learners is their inability to focus and pay attention to a specific task, and furthermore, to maintain paying attention to these tasks. According to Perold et al. (2010) learners who are diagnosed with ADHD work best on tasks which they have chosen themselves and find interesting. They tend to attend automatically to things they enjoy, but they usually have great difficulty in doing new things or less enjoyable tasks.

According to Barkley (2007) teachers may face the following problems in the classroom (also see 1.5):

The ADHD learner.....

- fails to pay close attention to details
- has difficulty finishing tasks
- finds it difficult to organise tasks
- has difficulty focussing on tasks
- is easily distracted

- fidgets with feet and hands
- has difficulty remaining seated
- talks continually and often interrupts the teacher
- blurts out answers before the teacher has finished the question
- does not like homework or schoolwork that requires sustained mental effort
- loses things which he / she would need for activities, such as pencils and books

2.7.1.2 Classroom behaviour

ADHD learners' behaviour has proven to be quite challenging to teachers as they seem to be constantly in motion. They fidget, move about, tap their fingers and feet, hum and talk constantly. These learners tend to make careless mistakes in their schoolwork due to their inability to pay close attention to detail. Their inattention may also fluctuate frequently throughout the day or from one day to the next. They may be able to focus on their maths one day, yet the next they are unproductive. As a consequence ADHD learners may be punished for their successes, as it were, due to the fact that the teacher might feel that the learner was able to pay attention and get his work done one day, yet the following day he seems "lazy" and "disinterested". Kos (2004) discusses various behaviour problems that ADHD learners may exhibit within the classroom and which are dependent on their ADHD type profile. For example, a learner with ADHD predominantly inattentive might have difficulty following the teacher's instructions, obeying the classroom rules, staying on task and completing her work, whereas a learner with ADHD predominantly impulsive might blurt out answers in class without permission or talk with other learners at inappropriate times. Finally, learners with ADHD predominantly hyperactive might have problems sitting still, rocking in their chairs, and repetitively tapping their hands or feet. Most learners with ADHD, however, exhibit behaviour problems in the classroom related to *at least* two of the core ADHD symptoms.

2.7.1.3 Academic development

As can be expected, the complications accompanied by ADHD affect the learner's academic development as well. They are not able to fully concentrate in order to comprehend lessons

or instructions (Picton, 2002). The process of learning during the foundation phase requires a young learner to be able to observe, manipulate, change and try out new events and objects. Should the learner not be able to concentrate and focus on a particular task or activity, learning is hampered. These learners' academic performance may further be impaired by an inherent tendency to be disorganised. As a result they often misplace books, stationary and other materials which are needed to complete specific tasks or assignments (Kos, 2004)

Furthermore, impulsivity, hyperactivity and the difficulties in sustaining attention are commonly associated with learning difficulties which develop secondary to ADHD. Learners who cannot concentrate experience numerous learning difficulties. It is therefore important that teachers understand the close relationship between ADHD and learning difficulties (Harisarsad, 2010). Kos (2004) believes that it is important that academic assessments are conducted to determine whether the learner has any specific learning difficulties, such as problems with reading, writing, comprehension or mathematics.

Teachers and parents should always keep in mind that no significant correlation exists between ADHD and talent or intelligence. The academic challenges that the ADHD learner face may be attributed to the fact that he finds it difficult to concentrate/focus, or that he is not managed correctly in the classroom (Barkley, 2002).

According to Holtz and Lessing (2002) academic underachievement has far-reaching consequences for the ADHD learner, such as rejection by fellow learners and self-rejection. Learners' self-concept, attitude towards life as well as future opportunities are negatively influenced.

2.7.1.4 Social behaviour

According to Greeff (2005) it is well-recognised that the ADHD learner often displays comorbid disorders such as conduct disorder, mood disorders, anxiety and learning disorders. These conditions can have a profound impact in the learner's social environment. Cook (2005) explains that ADHD learners are likely to be rejected socially as they tend to

misinterpret social cues in an overly hostile way, make offensive remarks, impulsively interrupt the teacher and peers and refuse to follow game rules, especially in a social environment.

Some of the long term complexities which can develop in the ADHD learner's life involve social isolation and a low self-esteem, preventing them from reaching their full potential (De Jager, 2004). ADHD learners are often teased as they cannot cope with their work at school. They often feel that they do not 'fit in' and are different to the other learners in the class. According to Bentham (2011) peers may find ADHD learners difficult to relate to and they consequently avoid playing with them. These social challenges are often the result of these children's impulsive and hyperactive behaviour.

2.7.1.5 Positive influences in the classroom

Some positive traits are associated with ADHD in learners and it is crucial that teachers are familiar with them. ADHD learners may excel in some areas and it could provide the teacher with a window of opportunity to motivate and connect with the learner. According to Loughran (2006) these learners can be very creative and imaginative. The learner who may seem inattentive or perhaps bombarded by a number of thoughts at once, may become a master problem-solver or a great source of ideas. They may also be great artists. Despite the fact that ADHD learners are easily distracted, they also notice things which others fail to note. ADHD learners can be extremely flexible as they often consider more than one option at a time. Accordingly, they won't become set on one alternative and are more likely to be open to different ideas. Furthermore, Ramirez-Smith (1997) states that gifted ADHD learners can work quickly and produce high quality work. These learners have energy and drive and as long as they are motivated, the teacher can achieve great success. While motivated they will work and play hard, striving for success. Once they have become interested and focused on a task it is actually difficult to distract them, especially if they are engaged in a hands-on or interactive task. ADHD learners are spontaneous and may be interested in a variety of activities. Due to their lively personalities they may be exasperating, but also entertaining and interesting at the same time (Ramirez-Smith, 1997).

2.7.1.6 The influence of the ADHD learner on other learners

The ADHD learner can affect the learning environment in a classroom by causing frequent distractions and displaying disruptive behaviour which have an impact on both teachers and other learners (Colberg, 2010). Kos (2004) explains that there are several possible reasons for ADHD learners' difficulty with peers. It may be that they tend to exhibit behaviours that are considered by their peers as controlling, trouble-making and aggressive. These types of behaviour are often perceived negatively by their peers and result in exclusion from play activities. Cook (2005) also mentions that these learners may easily annoy and offend their peers as they tend to misinterpret social cues and struggle with expressing negative feelings in a safe and appropriate manner. Interestingly, research has also suggests that the teacher's behaviour and attitude toward the ADHD learner has an impact on other learners' perceptions of that learner (Kos, 2004).

2.7.2 The teacher and ADHD

2.7.2.1 Training

Perold et al. (2010) found that teachers feel that they are ill-informed about ADHD because they had limited or no training on this disorder and its management in the classroom. Knowledge gained from informal information sessions is not always accurate, nor based on scientific research. Inaccurate information of ADHD can lead to teachers withholding much-needed support, making inaccurate referrals and providing parents with incorrect advice.

A study conducted in Dakota by Mahar (2007) indicated that professional development at both the pre-service and in-service levels continues to be vital in order to create understanding of ADHD learners. This study highlighted several aspects of teaching ADHD learners, such as the characteristics of learners diagnosed with ADHD, the scope for and management of medication, guidance on how to educate and assist ADHD learners with developing organisational skills, how to equip ADHD learners with coping strategies for dealing with anxiety about school expectations, how to make educational and behavioural

accommodations for ADHD learners, and how to use a multi-team approach when dealing with these learners (Mahar, 2007) .

It is quite clear that teachers with no training in special needs education are greatly challenged by managing ADHD learners in their classrooms.

2.7.2.2 Knowledge levels of teachers

If knowledge is defined by the acquisition of information and ways to apply it successfully, whether it occurs by means of experience or training, the implication is that having knowledge of ADHD means having information and skills that are the products of experience and/or training (Perold.et al., 2010).

Over the past 10 years only a few South African journals and articles have been published which assessed teachers' knowledge of ADHD. I was not able to find South African studies which looked into training provided for teachers or provided South African teachers with guidelines to successfully include the ADHD learner in mainstream classrooms. Likewise, Picton (2002) points out that there is a lack of knowledge on how teachers and professionals can best help the ADHD learner to deal with their frustration within the classroom setting.

During a study conducted in the Pretoria region, teachers reported that they were not equipped to deal with ADHD learners due to a lack of sufficient training during their tertiary teaching qualifications. These teachers experienced the classroom situation as extremely challenging and difficult to manage, especially when faced with an ADHD learner. This left them feeling incapable and unable to help and manage these learners because they find it difficult to understand why ADHD learners behave the way they do (Kendal, Wagner & Ruane, 2011).

After conducting their study, Perold et al. (2010) reached the conclusion that there is a substantial lack of knowledge amongst South African teachers in the Cape Metropole in certain key areas of ADHD. The respondents were knowledgeable about the problems of ADHD learners regarding organisational skills, but 59.6% of them showed a lack of

knowledge while 31.2% held a misperception on the epidemiology of ADHD. Furthermore, 70.8% of the respondents showed a lack of knowledge and 9.6% held a misperception on the causes and genetics of ADHD. This lack of knowledge presents a matter of concern as teachers play a pivotal role in the recognition, referral and treatment of ADHD.

Perold et al. (2010) came to the conclusion that teachers seem to be familiar with the primary symptoms of ADHD and they often base their reasons for referral on them. This approach, however, can be ineffective as several of the primary symptoms of ADHD have poor predictive value. Being familiar with ADHD does not imply having adequate knowledge of the disorder.

2.7.2.3 Challenges teachers face

Teachers dealing with ADHD in the classroom experience significantly higher levels of work related stress (De Jager, 2004). Kos (2004) conducted a study during which primary school teachers' knowledge, attitudes, and behaviour toward learners with ADHD were analysed. He concluded that teachers experience numerous obstacles whilst trying to include ADHD learners in classroom activities. When asked, "What may prevent you from implementing such (inclusion) strategies?", 50% of the teachers indicated that the most common obstacles are time and the number of learners in the classroom. From the responses of a large sample of teachers it was concluded that limited time is considered to be a major factor in preventing them from using inclusive strategies in the classroom. Many teachers indicated that lesson planning and classroom management are time-consuming. Inclusive education has consequently added an extra load to their planning. Teachers were also concerned by unfairly spending more time with troubled, miss-behaving learners than with their well-behaved counterparts.

According to Lougy, De Ruo and Rosenthal (2007) an important initial step for teachers is to accept ADHD as a real disorder and not a myth, and that educational support during the Foundation Phase is very important in minimising problematic ADHD behaviour and learning challenges. There is a considerable burden of responsibility placed upon teachers to provide learners with ADHD with a conducive learning environment. To this end, a teacher should be

aware of the causes and symptoms of ADHD and be able to adapt and design classroom activities to ensure maximum involvement of these learners.

Colberg (2010) emphasises the importance of teachers having a basic understanding of the causes of ADHD and the fact that learners have no control over their behaviour; they unintentionally misbehave and fail to concentrate on the task at hand. Teachers need to understand what behaviour patterns the ADHD learner may exhibit, and which of them to address or overlook to ensure smooth running of classroom activities.

2.7.2.4 Strategies that can be employed by teachers

The number of learners diagnosed with ADHD increases yearly and as a consequence teachers need to adapt their classroom management strategies in order to support the academic development of these learners. According to a study conducted by Harisarsad (2010) on challenges faced by teachers in inclusive classroom settings, teachers in mainstream schools generally express negative attitudes to mainstreaming policies, and as a result they find themselves facing many obstacles. In the current education dispensation in South Africa, as is the case in many other countries (USA, UK, Sweden, the Netherlands, Australia, Ghana, etc.), teachers in mainstream classrooms have to accommodate learners with a variety of impairments and learning disorders.

Colberg (2010) advises teachers to adapt classroom management strategies to meet the needs of all learners, including those learners with ADHD, without affecting the needs of the rest of the learners in the classroom. Kos (2004) points out that teachers habitually believe that ADHD learners require extra teaching time and effort. They realise that they have to modify their teaching by providing greater structure and routine in their classes and by preparing the work in more detail. According to Hartnett and Rinn (2004) most learners with ADHD are very intelligent or artistically gifted, however, they need the right guidance and support from teachers and parents. Teachers can provide considerable support and encouragement. Each learner should be evaluated in order to determine his strengths and weaknesses. The teacher should aim to use strategies to help the learner focus and develop to his full capability (US Department of Education, 1994). If the teacher helps the learner to

excel in an area of strength, it may significantly improve the learner's confidence as well as his social and emotional success.

In a study on primary school teachers' knowledge of and attitudes and behaviour toward learners with ADHD, Kos (2004) came to the conclusion that teachers tend to use positive strategies more often than negative strategies. He found that the most commonly used strategy to manage the behaviour of the ADHD learner was reinforcement. Reinforcement strategies are used significantly more frequently than negative consequences and planned ignoring. Teachers also perceived the re-organising of both the classroom and curriculum as the most useful technique for managing the classroom behaviour of ADHD learners effectively. This is confirmed by the APA manual (2000). Signs of ADHD may be minimal or even absent when the learner is under strict control, in a calm and novel setting, engaged in interesting activities, in a one-on-one situation and while the learner experiences frequent rewards for appropriate behaviour (DSM-IV-TR, 2000:86- 87). This implies that teachers should keep classroom activities interesting and provide frequent positive feedback and reinforcement to the ADHD learner.

Colberg (2010) points out that teachers should self-reflect each day and make changes and adapt their approaches when needed. Sometimes the ADHD learner is not present (mentally) in the classroom, and then it is important for the teacher to step back and understand that there will be time to revise the activity at a later stage. By trying to force the learner to complete the learning activity both teacher and learner will get frustrated. Evaluating ADHD learners is an ongoing process which should even be conducted during the lesson presentation phase. The teacher should look for signs such as daydreaming, frustration, lack of comprehension and loss of focus. Most teachers will find that when they do apply teaching strategies aimed at keeping the focus of ADHD learners, the rest of the learners in the classroom will also benefit (Flick, 1997).

Throughout the literature research I noted that there are many suggestions for teachers on how to teach and manage the ADHD learner effectively. The most discussed suggestion was to use positive reinforcement. Teachers should reward the learner when he has accomplished a task. Furthermore, the teacher should not only reward the learner when he

completes his classroom activities, it is also important to reward for other accomplishments such as sitting quietly, listening and following directions. Carbone (2001) suggests that teachers use positive reinforcement in order to reduce impulsive activity and for improving on-task behaviour and academic performance. However, it is of vital importance that positive reinforcement should always outweigh negative reinforcement. Despite the fact that positive reinforcement acts as an aid to learners' learning and to decrease ADHD symptoms, it also provides emotional support and it enables the teacher to recognise and build upon the strengths of the ADHD learner. By applying this strategy, the teacher can create reassurance, acceptance and trust by using humor, compliments and showing the learner care and attention (Carbone, 2001).

According to the US Department of Education (1994), successful programmes for learners with ADHD should integrate the following three components:

- academic instruction;
- behavioural interventions; and
- classroom accommodations.

Cook (2005) argues that teachers should apply strategies for improving the attention of ADHD learners, such as seating them in front close to the teacher and providing one instruction at a time, keeping it brief and repeating the instruction. Lesson activities and assignments should be broken up into small manageable steps, and the ADHD learner should be requested to repeat the instructions to determine whether she has a clear understanding of what is expected.

Teachers should put considerable thought into the placement of the ADHD learner in the classroom and plan and provide supportive classroom features as these are considered to be crucial when seating these learners. Kos (2004) believes that ADHD learners perform at optimal levels when the classroom is highly structured with minimal sensory distractions, when routines are in place and they are seated close to the teacher or assistant. Carbone (2001) provides a list of effective suggestions which teachers can use as guidance when planning a classroom seating arrangement for the ADHD learner. First, it is recommended

that the classroom should be arranged in the traditional “row” seating design as it is the most structured and predictable seating design. Second, the ADHD learner should be placed at a desk in the front row as close to the teacher or assistant’s desk as possible so that he will be less distracted by the other learners. This will enable the ADHD learner to focus on the teacher and instructions received. This seating arrangement will also allow the teacher to provide immediate feedback even on small achievements which can easily be missed if the learner does not sit at close range. The teacher will also be able to monitor the learner more effectively and the learner will be able to ask for assistance in a more conspicuous manner. Next, the teacher should make sure that the learner is placed alone at the desk and away from potentially distracting areas such as a window, pencil sharpener or play area. Carbone (2001) also suggests that it may be helpful to surround the ADHD learner with stronger, well-behaved, attentive, friendly learners. This placement may encourage positive peer interactions as well as provide a model for proper classroom behaviour.

In view of the fact that ADHD will affect many learners throughout their lives, teachers should constantly aim at creating environments to help the learner to succeed academically, emotionally and socially (Perold et al., 2010). One of the best practices that teachers can follow is to become informed and stay up to date with recommended strategies for the management of ADHD learners in their classrooms. They should also consider their beliefs about the condition including the ways in which they can support the learners. Kos (2004) believes that most of the suggested teaching strategies for ADHD learners have been thoroughly validated, provided they are implemented correctly. Teachers should therefore ensure that they have sufficient knowledge of these strategies and that they implement them correctly. In keeping with these findings, Brown (2007) argues that early identification of learners with ADHD is important since appropriate interventions can prevent a learner from becoming demoralised by repeated experiences of frustration and failure. Being equipped with the appropriate knowledge of ADHD the teacher can identify the condition timeously, and by applying the appropriate interventions the ADHD learner can achieve in accordance with the level of her abilities. It is important, however, that management strategies should not be impacting negatively on the rest of the class (Colberg, 2010). Given that teachers have a strong influence on their learners, both behaviourally and academically, they should ensure that they communicate effectively with

their ADHD learners since they are prone to academic failure, negative social behaviour and impaired relationships with peers and teachers (Geng, 2011).

Holtz and Lessing (2002) believe that the first step for teachers is to identify the problem, as knowledge of learners with ADHD and their learning barriers may contribute to a more positive attitude on the teacher's part. Teachers' knowledge of ADHD is extremely important and they should have a clear understanding of how ADHD will influence their classrooms. According to Perold et al. (2010) and Holtz and Lessing (2002) an understanding of ADHD will enable teachers to change their classroom management styles, to have realistic expectations, to adapt the curriculum and to implement a variety of teaching strategies in order to create a positive learning environment conducive to the academic, social and emotional success of ADHD learners. Parents also play an important role in the education of their children, therefore close interaction and communication between parents and teachers are essential.

2.8 SOME INTERNATIONAL INITIATIVES WITH REGARD TO ADHD AND INCLUSIVE EDUCATION

As mentioned earlier, numerous studies have been conducted on different aspects of ADHD, but very few have examined teachers' knowledge and perceptions of ADHD. Perold et al. (2010) identified one Australian study and two North American studies in this regard. Both studies concluded that teachers who participated in the research, had an average to good general knowledge of ADHD. However, only a few teachers had formal or informal training in ADHD and their general knowledge of the disorder improved as a result of their experience of teaching learners with ADHD.

In several countries learners diagnosed with ADHD qualify for special education services. According to Colberg (2010) ADHD learners in California are eligible for special education services under Section 504 of the Rehabilitation Act of 1973. These may include classroom accommodations and modifications such as extra time for assessment and regular breaks.

Papalia et al. (2011) mention that 14 % of learners in public schools in the United States received special educational services under the *Individuals with disabilities Education Act* during 2006. This Act ensures free and appropriate public education for all learners with disabilities. In 1991 the United States Department of Education issued a policy that prescribed that a school must provide appropriate educational service to learners who have been diagnosed with ADHD (Colberg, 2010). The aim of this policy was to clarify the responsibilities of the government and local education authorities under the current federal law to ensure that the educational needs of ADHD learners are met. Meeting the needs of ADHD learners in the US rests upon the entire educational system, not only on teachers. By issuing the *Classroom Management and the ADHD Student 11 policy*, the US Department of Education tried to ensure that the academic needs of these learners would be met, either through general or special education programmes.

Colberg (2010) discusses two current Federal laws in the US which ensure that the ADHD learner receives an appropriate public education, namely *The Individuals with Disabilities Education Act (IDEA)* and *Section 504 of the Rehabilitation Act of 1973*. If ADHD affects a learner's academic performance the prescribed course of action is to consider appropriate special education services. However, if the learner is not affected academically but it becomes apparent that the disorder has an impact on the school setting, the course of action would be to develop a plan consistent with Section 504. Section 504 of the *Vocational Rehabilitation Act of 1973* is a civil rights law that provides for a free, appropriate public education and prevents discrimination against individuals with disabilities at any institution that benefits from federal funding (Mastropieri & Scruggs, 2007). Section 504 hence provides for equal opportunities regarding all aspects of education. A learner need not be classified as disabled, according to the IDEA guidelines, to qualify for Section 504 intervention. Should learners demonstrate a significant learning problem that affects their ability to function in school, they will qualify for these interventions. Learners are usually referred for Section 504 assistance by teachers or parents. Should the learner be eligible, the school is required to create a written plan that will help accommodate the special needs of the learner and provide an accessible environment. Accommodation plans may include a statement of the learners' weaknesses, strengths, accommodations to be implemented and the person responsible for implementation.

The *Special educational needs code of practice* was introduced in England and Wales in 2002. It suggests that learners with special education needs or learning barriers receive specialised support to help them learn more effectively. The United Kingdom has a wide variety of special needs staff working within the educational system. Depending on the size and type of the school, there may be special needs assistants, educational welfare officers and educational psychologists which are employed either as permanent members of staff or as visiting consultants. Learners will be issued a “Statement of special educational needs” which entitles them to additional support. According to Cowley (2006) this may result in an ADHD learner being assisted by a helper in some lessons or even for most of their time at school. In an informal search regarding this matter, I discovered numerous schools in the UK who specialise in accommodating ADHD in the mainstream classroom, such as Breckenbrough School in North Yorkshire and Oliver House School in Lancashire.

In an attempt to move away from special schools, Sweden and other Scandinavian countries have long adopted an active policy of inclusion and integration of persons with disabilities in their society and schools. Flem and Keller (2000) explain that Scandinavian countries use terminology such as “comprehensive schools” and “common schools for all that suit every child”. The Swedish Education Act states that all learners shall have equal access to education and that all children shall enjoy this right, regardless of gender, residence, or social or economic factors. Special support is also given to learners who have difficulty with the schoolwork.

2.9 THE EDUCATIONAL DISPENSATION IN SA WITH REGARD TO ADHD AND INCLUSIVE EDUCATION

2.9.1 Introduction

Over the past 15 years education in South Africa has undergone numerous and radical changes. According to Landsberg, Kruger and Nel (2006) and Swart and Pettipher (2005) the development of inclusive education in South Africa followed international trends and changes.

The South African Department of Education (DoE) introduced the Education White Paper 6 in 2001. It entails an action plan which aims at enabling all learners with disabilities to learn and develop to their full potential. To date it seems as if little has been done to implement this inclusive education plan.

Holtz and Lessing (2002) believe that South African teachers are in need of knowledge and training concerning specific problems which ADHD learners experience. Aid should be provided to teachers to cope with various problems in the classroom. This need is recognised in Education White Paper 6 which attends to the DoE policy on human resource development of classroom teachers: "Classroom teachers will be our primary resource for achieving our goal of an inclusive education and training." (DoE, 2001). This implies that teachers' skills and knowledge need to be improved and new skills have to be developed in order to practice inclusive education successfully. This document also recommends that ongoing assessment of teachers through developmental appraisal, followed by structured programmes to meet their training needs, will make a critical contribution to the success of inclusive education. In mainstream education, the DoE's priorities would include multi-level classroom instruction to enable teachers to prepare lessons with variations that are responsive to each learner's needs, and which would furthermore aid curriculum enrichment, co-operative learning and the dealing with learners with behavioural problems. Training would focus on supporting all teachers, learners and the system so that all learning needs can be met. The focus would be on teaching and learning factors with emphasis on the development of good teaching strategies that will be to the benefit of all learners. Additionally they will assist in overcoming all barriers in the system that prevent it from meeting all learning needs and also facilitate the adaptation of support systems available in the classroom.

During September 2010 the DoE did a presentation on the *STATUS OF INCLUSIVE EDUCATION, ACCOMPANYING CHALLENGES AND STRATEGIC RESPONSE*. The presentation focused on development of special needs schools, specifically learners with hearing and visual disabilities. Seven hundred teachers for visually impaired learners and 1000 teachers

for hearing impaired learners would be trained in specialised skills from 2011 to 2013. Unfortunately learning disabilities such as ADHD were omitted.

During July 2010 the South African Association for Learning and Educational Differences (SAALED) was requested by the Gauteng Department of Inclusive Education and endorsed by the National Department of Inclusive Education, to provide training to teachers and class assistants on specific barriers to learning. Once again no training focused on the inclusion of ADHD in mainstream classrooms. Although ADHD was not mentioned in the above documents or seminars, an amendment to the National Policy pertaining to the conduct, administration and management of examinations and assessments was published during May 2014 which also included ADHD as a learning barrier (Government Gazette, no 37652, 2014). The document contains amendments which were effected to the National Education Policy Act, 1996 (Act no 27 of 1996) pertaining to differentiated methods of assessment to support learners who experience barriers to learning and assessment.

2.9.2 Important policy documents on Inclusive Education

For the purpose of this study the following documents/policies are discussed briefly:

- Education White Paper 6 (2001)
- Guidelines for Inclusive Learning Programs (2005)
- National Education Policy Act, 1996 (Act no 27 of 1996)

2.9.2.1 Education White Paper 6 (2001)

The South African Department of Education (DoE) implemented a policy of inclusion of all learners in the education system as outlined in *The Education White Paper 6* (2001). The policy requires schools and educational institutions to include all learners with barriers to learning in their mainstream classes. The policy states that inclusive education and training is essentially about acknowledging that “...all learners can learn and need support, accepting and respecting the fact that all learners are different and have different learning needs which are equally valued, maximising the participation of all learners in the curriculum of educational institutions and empowering learners by developing their individual strengths.”

(2001). It furthermore acknowledges that some learners clearly require more intensive and specialised forms of support in order to develop to their full potential. An inclusive education system should be organised to provide various levels of support to learners and teachers by means of a systems approach with collaboration between the systems. The effectiveness of such collaboration is confirmed by Bronfenbrenner's Ecological model which holds that development is influenced by several interacting systems (see Section 2.10.5). During my literature study I noted that teachers find it difficult to implement this policy as they feel that they do not have sufficient knowledge and training to assist learners in overcoming a variety of learning barriers (Perold et al., 2010; Dalton, Mckenzie & Kahonde, 2012).

The OPERATIONAL MANUAL TO THE NATIONAL STRATEGY ON SCREENING, IDENTIFICATION, ASSESSMENT AND SUPPORT was released by the DoE during 2008. This manual is part of the implementation of the Education White Paper 6 and it focuses on building an inclusive education system with special emphasis on special needs education. Once again, ADHD is not mentioned in this document.

2.9.2.2 Guidelines for Inclusive Learning Programmes 2005

The South African policy on learners who experience barriers to learning is on par with international trends which dictate that these learners should be accommodated in mainstream classrooms. Landsberg et al. (2005) highlights the overarching goal of the national education policy which is to enable all learners to value, have access to and succeed in lifelong learning. The policy further provides guidelines to teachers, administrators and other personnel on dealing with diversity in mainstream classrooms. This includes adapting curricula, lesson plans and the grouping of learners. Learning programmes should be structured suitably and assessment strategies should be flexible to meet the needs of the specific learners. It furthermore specifies that lesson plans have to provide differentiated learning, teaching and assessment activities to ensure effective multi-level teaching. However, adaptation of learning, teaching and assessment activities will be required at lesson plan level for learners who need specific additional support due to individualised barriers to learning.

Although ADHD is categorised as a learning disorder in this document, no further mention is made in discussions and guidelines. Section 2.11 of the policy provides guidelines “...for interaction with the learner who experiences memory and concentration barriers...” (DoE, 2005) which can be linked to ADHD. Teachers are not provided with specific information or guidelines on how to support learners with ADHD in their classrooms.

2.9.2.3 National Education Policy Act, 1996 (Act no 27 of 1996) with amendments

This Act inscribes into law the policies for the national system of education, the legislative and monitoring responsibilities of the Minister of Education as well as the formal relations between national and provincial authorities. Provisions are made for policies relating to curriculum, assessment, quality assurance and monitoring and evaluation. Annexure C of this Act was published during May 2014 in the Government Gazette, signifying approval of amendments to the conduct, administration and management of examinations and assessments. Differentiated methods of assessment to support learners who experience barriers to assessment are prescribed, aiming at equalising opportunities for all learners by addressing barriers to learning (DoE, 2014). Differentiated assessment and accommodations should be put into practice early and throughout a learner’s school career to provide her with the opportunity to realise her full potential. The importance of early identification of barriers to learning and assessment is prescribed in section 1(7) where it is stated that “...learners in need of accommodations should be identified as early as possible in order to put the necessary mechanisms in place and to accustom learners to the assessment method concerned before they are externally assessed.”

Accommodations or concessions for assessment, as well as the procedure for identifying learners eligible for these concessions, are described in section 2 of this document (2014). Initial assessment should be conducted by the Accommodation/Concessions Committee by using a system of screening, identification and assessment of barriers which have been approved by the DoE. The next step is to verify and confirm the assessment of the learner through the District Based Accommodation/Concessions Committee and the School Based Committee who will then determine the form and level of support required by the learner.

Hereafter the Provincial Accommodation/Concessions Committee will make a decision as to whether accommodations should be granted. ADHD is specifically mentioned in Section 3(8) as a learning difficulty which is eligible for differentiated assessment and accommodations. Furthermore, learning difficulties which may affect the learner's ability to function effectively in areas such as understanding, interpreting, following directions and transferring knowledge, are identified in Section 3(4) as being eligible for accommodations. Section 3(8) of the Act acknowledges that ADHD learners may become disorientated during assessments, thus preventing them from giving a true account of their knowledge or answering the question paper to the best of their ability. Accommodations include assistance with either the planning of assignments or consistent encouragement and monitoring in order to prevent learners from quitting and submitting incomplete assessment work or examination scripts.

Differentiation Strategy or Accommodations	Visual impairment/ colour blindness	Deaf/ Hard of hearing	Physical Barriers	Learning Difficulty	Behaviour, Anxiety, ADD / ADHD/ Autism	Limited Functional Speech	Other Medical Conditions
Adaption of questions	*	*	*	*		*	
Additional Time	*	*	*	*	*	*	*
Digital Player/ Recorder	*		*	*	*	*	
Braille	*						
Computer / voice to text / text to voice	*	*	*	*	*	*	*
Enlarged Print	*		*				
Handwriting	*		*	*	*	*	*
Medication/food intake	*		*				*
Oral examination	*	*	*	*	*	*	*
Personal assistant			*				*
Prompter				*	*		
Reader	*	*	*	*			*
Rest Breaks	*	*	*	*			*
Scribe	*	*	*	*	*	*	*
Separate Venue	*	*	*	*	*	*	*
Sign Language Interpreter		*					
Spelling		*		*		*	
Transcription of Braille	*						
Video/DVD recorder/		*				*	

Webcam							
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Figure 2.2 Accommodations for learning barriers, DoE (2014)

Special Needs education used to adhere to the medical model of treatment (see 2.10.6) which has become increasingly outdated amongst professionals. There is currently a move towards differentiated learning in an attempt to include all learners in the classroom. According to Bouwer (2006) the remedial approach to education is a problem-centred, needs-based approach to learning and developmental difficulties. However, learning barriers seem to be the preferred terminology to explain why some learners do not experience learning success. The term “learning barriers” is preferred to “remedial or special needs” which signifies a medical or deficit approach to educational difficulties and additionally locates the problem within the learner (as postulated in the medical model), rather than within both the learner and the environment (as proposed in the Bronfenbrenners’s Ecological model) (Howel in Walton, Nel, Hugo and Muller, 2009). These authors explain that barriers to learning acknowledge that various learning or educational difficulties may arise from a number of sources. The policy of inclusive education requires both teachers and schools to accommodate the diversity of all learners and to provide equal educational opportunities of high quality to all. As far as learners who experience barriers to learning are concerned, the policy implies enriching of the regular education taking place in the classroom with learning support (Bouwer, 2006).

In order to manage ADHD behaviour of learners it is necessary to explore and understand various models explaining the causes and treatment of ADHD.

2.10 MODELS OF ADHD

Several theoretical explanations of ADHD have emerged over the last decade. In order to understand, diagnose and treat ADHD effectively, various models have been designed which explain the behaviour of ADHD learners and serve as a systematic guide to teachers and other professionals.

The empirical findings from these models provide a basis for a better understanding of ADHD associated behaviour and also guidance to teachers and educational practitioners on the strategies that need to be employed to manage ADHD associated behaviour in classrooms. According to Sergeant, Geurts, Huijbregts, Scheres and Oosterlaan (2003) there is no single model which incorporates developmental data and predicts the developmental trajectory of ADHD.

For the purpose of this study I will discuss the following models:

Rappaport, Chung, Shore, Denney and Isaacs's Model of ADHD (2001) is considered as it postulates that ADHD results from a primary deficit in working memory only. This model is also known as the *Conceptual Model of ADHD*. This theory defines working memory as the processes that construct, manipulate and maintain information. In this model, attention is described as the target of working memory and hence inattention does not exist as there is always conscious activity. Accordingly, Rappaport et al. (2001) points out that ADHD learners learn to avoid the types of activity that place demands on the working memory processes by using escape behaviours.

Barkley's model of ADHD (1998, 2003, 2007) is discussed as this model asserts that internalised, self-generated motivation of the ADHD learner is weak at initiating and sustaining goal directed behaviour. External forms of motivation must be arranged within context at the point of performance and motivation must be sustained for long periods (Barkley, 2012). Barkley (1998) proposes a lack of self-regulation and inhibition as the primary deficit of ADHD. I believe that Barkley's model of ADHD can serve as a guideline to both parents and teachers in understanding a learner's behaviour in the classroom.

Brown's model of ADHD (2007) is similar to Barkley's model, but it has different primary sources of ADHD. The Brown model of ADHD was derived from intensive clinical interviews with individuals diagnosed with ADHD and with their families (Brown, 2007). The interviews and research probed the impaired cognitive and behavioural activities in these individuals in relation to non-ADHD individuals of the same age and developmental level. As a teacher

and mother of an ADHD child, I believe that this model explains the condition and especially the ADHD child's behaviour, most accurately.

Sergeant's Cognitive Energetic model of ADHD is also discussed. The defining feature of this model is the idea that learners' ADHD symptoms also relate to deficits in various energetic mechanisms, such as activation and effort (Sergeant et al., 2003). Essentially, deficits in the energetic mechanisms may lead to learners with ADHD being psychophysiological under-aroused in the classroom. Therefore, this model proposes that learners' hyperactive/impulsive and inattentive behaviours represent their attempts to counter their intrinsic psychophysiological under-arousal (Sergeant et al., 2003).

Swart and Pettipher (2005) argue that a major challenge to the education system is to understand the complexity of the interactions and influences between the learner, teacher and other systems that are connected to the learner. Therefore *Bronfenbrenner's Ecological theory* is also discussed. This model suggests that there are levels of interacting systems resulting in change, growth and development of the individual. In the field of inclusive education, this model has much relevance in emphasising the interaction between the learner's development and the systems within the social context (Swart & Pettipher, 2005). This model is also useful in understanding classrooms, schools, learners and families by viewing them as systems having an influence on each other's development (Frederickson & Cline, 2002).

The medical model proposes that disruptive behaviour is the result of maladjustment in learners who need to be referred to learner guidance clinics for therapy (Jones, 2003). This model presents ADHD as a brain dysfunction to be treated with medication that changes the biology of the brain (Honos-Webb, 2005). 'Remedial' education conventionally adheres to the medical model of diagnosis and treatment.

These models are subsequently discussed in more detail.

2.10.1 The Conceptual Model of ADHD

In an attempt to explain the therapeutic effects of different ADHD treatments, Rapport and his colleagues developed the conceptual model of ADHD. This model postulates the desirability of using a theoretical framework as guidance for the design and evaluation of therapeutic interventions for ADHD learners (Rapport et al., 2001). The conceptual model asserts that working memory involves processes that allow for organised behaviour and problem-solving skills. This is confirmed by Wolfe (2004) who also states that organised responses are dependent upon working memory processes, and difficulties with working memory skills could result in boredom, inattention, frustration and disorganisation.

Rapport et al. (2001) propose that the breakdown of working memory causes ADHD learners to resort to stimulation seeking behaviours in order to fill or replace the rapidly fading working memory traces. ADHD associated problems are the most common of all disruptive behavioural problems in young learners and they predict the early onset of oppositional defiant disorder (ODD) and conduct disorder (CD) (Van Lier, Muthen, Van der Sar & Crijen, 2004).

Research over five decades substantiate the clinical efficacy of behavioural interventions as a primary, complementary, or alternative treatment for children with attention-deficit hyperactivity disorder (Rapport et al., 2001). Behavioural interventions focus on academic performance, compliance or rule following, social skills and interactions with peers, teachers and parents. It also requires considerable involvement by mental health professionals, teachers, parents, peers and siblings to achieve desirable levels of efficacy.

However, despite the growing interest and developments in the field of behavioural interventions of ADHD, the conceptual model of ADHD proposes that this method is usually judged to be less effective compared to pharmacological management with stimulants (Rapport et al., 2001). According to Rapport's model, stimulants have a direct impact on the neurobiological substrate of ADHD, whereas behavioural therapy affects the core psychological features. In 1999, findings of the National Institute of Mental Health multicentre's Multimodal Treatment Study for ADHD (Orlando, Florida, MTA Group, 1999) which compared intensive behavioural treatment, psychostimulant treatment and combined therapy over a 14-month period for a large number of ADHD learners,

corroborated the superiority of psychostimulant over behavioural intervention (MTA Group in Rapport et al., 2001). This basic conceptual model of ADHD, illustrated in Figure 2 below, elucidates the assumptions underlying both behaviourally based and pharmacologically therapeutic interventions for learners with ADHD.

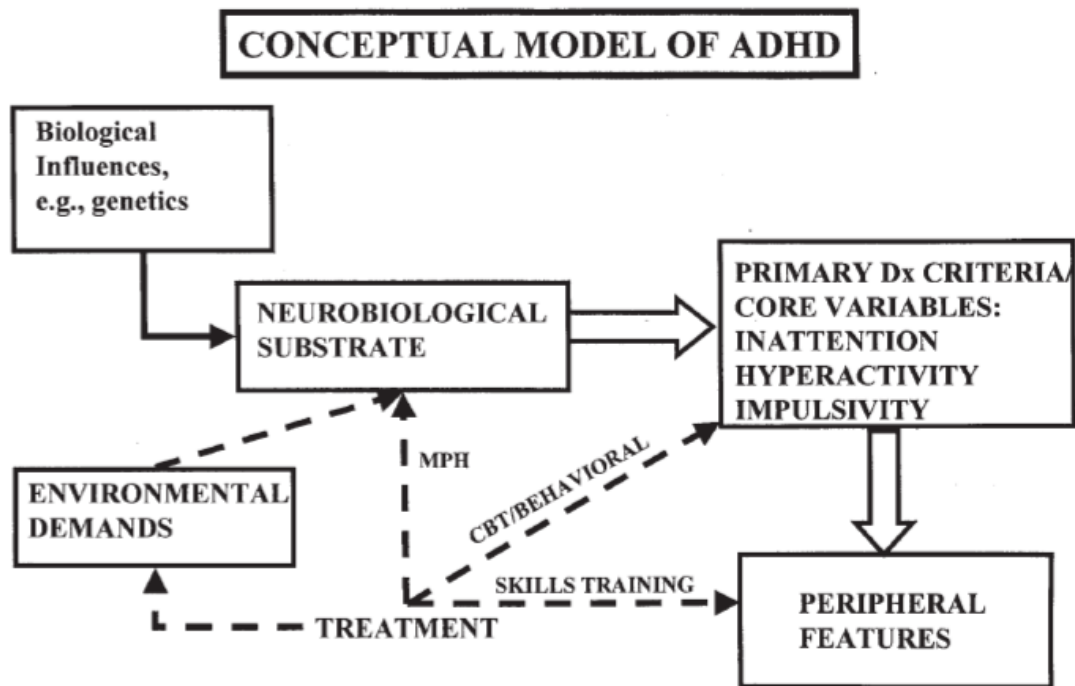


Figure 2.3: A conceptual model of attention deficit hyperactivity disorder (ADHD) based on extant literature. MPH = methylphenidate (Rapport, 2001).

CBT = cognitive-behaviour therapy

During 2001, Rapport and his colleagues proposed an alternative conceptual model of ADHD which proposes that behavioural dysfunction is rooted in cognitive models of recognition and recall processes, particularly in working memory. The alternative conceptual model is also known as the Working Memory model. This model focuses on the psychological rather than the biological features of ADHD. Furthermore, it posits that working memory plays a pivotal role in the organisation of behaviour and, as such, may help account for the poorly structured and disorganised behaviour in ADHD learners. These behaviours may include disorganisation, boredom, inattentiveness and high frustration levels. This does not, however, imply anything about the rate at which the ADHD learner's behaviour is executed (Rapport et al., 2001). In addition, this model posits that the failure of working memory not only leads to disorganised behaviour, but also motivates learners to redirect their attention

to other negative stimuli in the environment - a phenomenon described as stimulation seeking (Miltenberger, 2008).

Rapport et al. (2001) point out that learners with ADHD demonstrate frequent, rapid shifts in activity, especially under conditions that can be characterised as monotonous or too complex to enable thorough processing of stimuli. These findings may have a direct impact on how the teacher will plan both lessons and the management of the classroom. The process of redirecting attention can be conceptualised as a form of escape from monotonous or high task demand conditions, which is then observed by some teachers as hyperactivity and impulsivity. However, according to Cooper, Smith and Upton (1994) this behaviour should not be seen as actions originating from within the learner, but rather from within the interaction between the child and the teacher. Singh (2012) cautions that it is important to realise that the unacceptable behaviour occurs because it is indirectly reinforced since the teacher has not intervened to correct the behaviour, but has actually allowed it to continue – consequently creating a circumstance which stresses the importance of behavioural interventions by the teacher.

Research findings indicate that frustration of teachers with the behaviour of ADHD learners results in the teacher ignoring the learner (Cooper et al., 1994). Thus, both learner and teacher are often caught in a negative cycle of growing negative interaction. Often neither teacher nor learner can readily escape from this negative cycle, characterised by increasing misbehaviour of the ADHD learner and met by growing negativity of the teacher, which in turn causes the learner to rebel and misbehave even more. (Cooper et al., 1994).

2.10.2 Barkley's Model of ADHD

Barkley (1998, 2002, 2003, 2007) argues that the fundamental deficit in individuals with ADHD is lack of self-control and that inattention is a secondary characteristic of the disorder. In a recently published column, Barkley (2012:online) pointed out that since the late 1970's clinical researchers have asserted that ADHD likely involves a serious deficiency in the capacity for self-regulation.

Barkley emphasises that during the course of development, control over a child's behaviour gradually shifts from external sources to internal rules and standards. Controlling one's behaviour by internal rules and standards is referred to as self-control. Accordingly, Hamilton et al. (2006) points out that this model posits that learners with the Hyperactive type of ADHD does not have a deficit of attention, but rather of self-control and executive functioning. For example, young learners have very limited ability to refrain from acting on impulse. Instead, it is typical of a young child to "act out" the things that come to mind spontaneously. In addition, when a young child is able to refrain from acting on impulse, it is often because something in the immediate surroundings keeps him from doing so. For example, the child may refrain from throwing a toy when frustrated because his mother is present and he knows he will be punished, should he continue. This scenario differs from an older child who may also have the impulse to smash a toy, but who does not act on this impulse because he can anticipate the following consequences:

1. He won't have the toy to play with at a later stage.
2. His parents would be upset if he broke the new toy.
3. He would be upset for letting down his parents.
4. He would be upset because he let his temper get out of control — he let himself down.

In this example the child has learned to "inhibit" and regulate his behaviour based on internal controls and guidelines, rather than on the immediate threat of external consequences.

Barkley's Model of Behavioral Inhibition

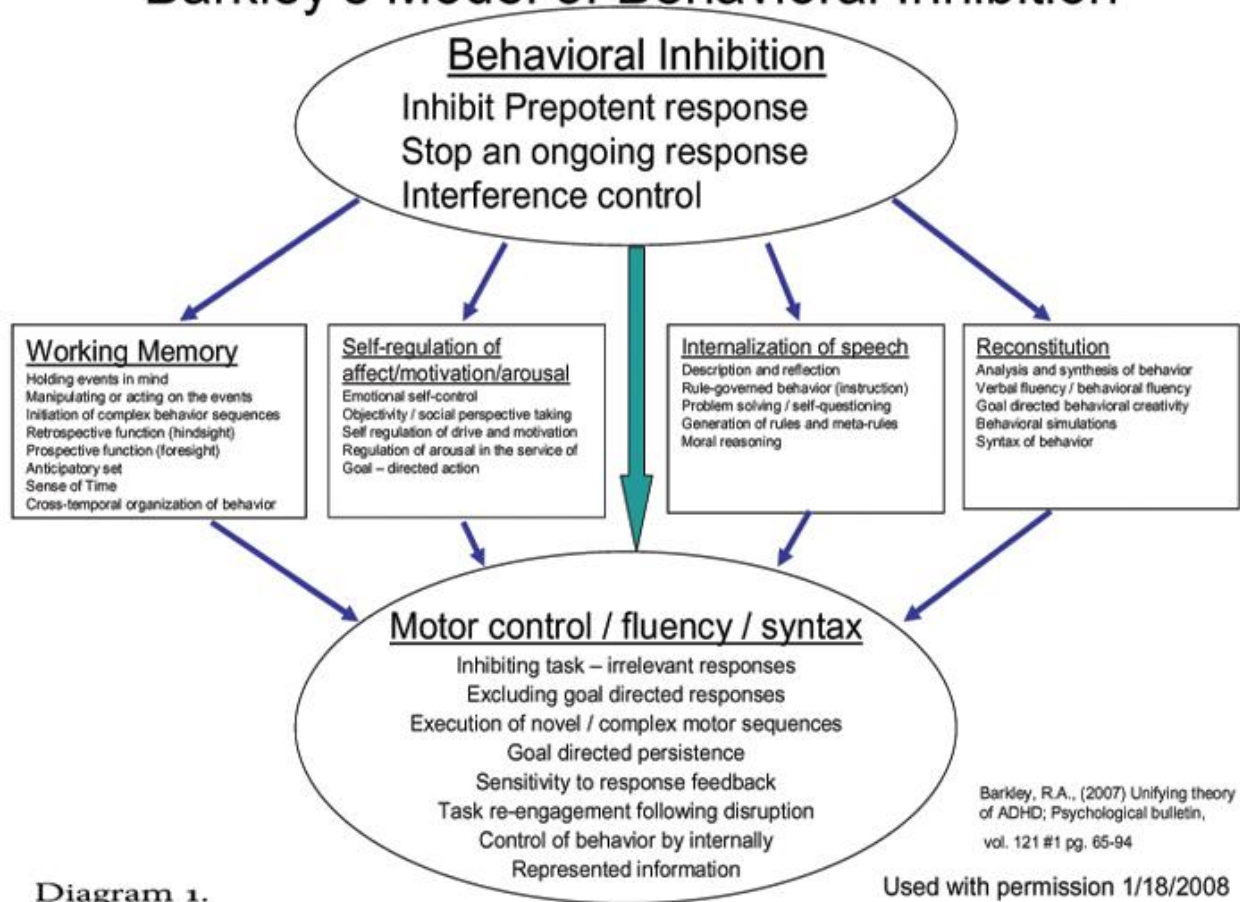


Diagram 1.

Used with permission 1/18/2008

Figure 2.4 Barkley's model of ADHD (Barkley, 2002)

Self-Regulation as the Core Deficit in ADHD

Barkley (2007) argues that the critical deficit associated with ADHD is the failure to develop the capacity for “self-control”, also referred to as “self-regulation”. He suggests that this results primarily from biological reasons, and not from parenting. As a result of a core deficit in self-regulation, specific and important psychological processes and functions subsequently fail to develop in an optimal way. Barkley (2012:online) also links these functions with Executive Functioning which can be referred to as “...those neuropsychological processes needed to sustain problem-solving toward a goal”. These include the following:

*** Working Memory**

Working memory refers to the learner's ability to recall past events and manipulate them in the mind in order to make predictions about the future, with specific reference to the results of actions taken. This is an important part of dealing effectively with day-to-day situations which Barkley believes is diminished in individuals with ADHD. In fact, recent research has documented a deficit in working memory in individuals with ADHD (Dendy, 2011:online).

*** Internalisation of Speech**

Internalisation of speech refers to the ability of the learner to use internally generated speech to guide the individual's behaviour and actions. Internal speech can be referred to as talking to oneself. It aids ADHD children to regulate and guide their behaviour and to solve problems which they face. Barkley (2007) argues that this capacity develops later and imperfectly in individuals with ADHD.

*** Sense of Time**

A sense of time refers to the ability to keep track of the passage of time and to alter one's behaviour in relation to time. Learners often need to estimate the time required to accomplish a particular task or assignment in order to determine whether the time they are spending on a particular task is proportionate to what is available. Barkley (2007) suggests that the psychological sense of time is impaired in learners with ADHD. As a result learners are unable to modify their behaviour in response to real world time demands, especially in the classroom during assessments.

*** Goal Directed Behaviour**

Goal directed behaviour refers to the ability to establish a goal in one's mind and use the internal image of that goal to shape, guide, and direct one's behaviour. Goal directed behaviour is a vitally important capacity for a learner as it underpins sustained effort and

persistence. Barkley (2007) argues that learners with ADHD have great difficulty making a sustained effort to achieve long-term goals.

Conceptualising ADHD as a disorder of self-regulation, and not a disorder of attention, has significant implications for understanding the difficulties experienced by learners diagnosed with ADHD as well as teachers who have to manage them in their classrooms. It can assist them in coping with and managing ADHD more effectively. Barkley (2003) argues that ADHD learners may not lack the skills and knowledge to be successful, but rather their problems with self-regulation often prevent them from applying their knowledge and skills when required. As Barkley (2003:79) aptly puts it: “ADHD is more a problem of doing what one knows rather than knowing what to do.” For example, even though ADHD learners may know the steps to follow in order to complete a school project properly, they may not act on this knowledge because of problems with managing time and using a long-term goal to guide behaviour.

As far as following classroom rules and completion of work are concerned, Barkley (2007) also emphasises the need to provide external prompts. Writing rules down on signs around the classroom is one way of doing it. The teacher may post class rules on an index card taped to the learner’s desk. During activities, one possibility is to have learners wear headphones and listen to a recording that provides frequent reminders to stay on task, to write neatly, and to check their work. In all of these examples, the principle is to compensate for the learners’ inability to control their behaviour through internal means by providing as many external prompts, reminders and motivation as possible.

2.10.3 The Brown Model of ADHD

From more than 25 years of clinical interviews and research with children, adolescents and adults who have ADD/ADHD, Dr. Brown has developed an expanded model to describe the complex cognitive functions impaired in ADHD learners (Brown, 2007). He holds the opinion that ADHD is not a behavioural disorder, but rather a complex syndrome of impairments in the management system of the brain.

This model describes executive functions, as Brown (2007) considers them to be the cognitive management system of the human brain. Although the model shows six separate executive function clusters, these functions continually work together, usually rapidly and unconsciously, to help each individual manage many tasks of daily life. The executive functions work together in various combinations. They appear in basic form in young children diagnosed with ADHD and gradually become more complex as the brain matures throughout childhood, adolescence and early adulthood. Executive functions are not fully developed until the learner reaches her early twenties. All individuals have occasional impairments in their executive functions, but learners with ADHD experience much more difficulty in the development and use of these functions than most others of the same age and developmental level. However, Brown (2005) points out that even those with severe ADHD usually have some activities where their executive functions work very well. ADHD learners may have difficulty with ADHD symptoms in most areas of their lives, but when it comes to a few special interests such as playing sports or station games, their ADHD symptoms are absent. This phenomenon causes ADHD to appear as a simple problem of lacking willpower, but Brown (2005) contends that it is not the case. These impairments of executive functions are usually due to inherited problems in the chemistry of the brain's management system.

By utilising clinical interview methods, Brown (2002) studied children, adolescents and adults diagnosed with ADHD according to the DSM-IV-TR criteria. Comparisons were made with reference to their descriptions of their problems with those of matched normal controls (Brown, 2002). Comparisons between the ADHD-diagnosed samples and the non-clinical samples in each age group yielded reports of impairments that can be recognised in the six clusters of this model of executive functions:

Executive Functions Impaired in ADD Syndrome

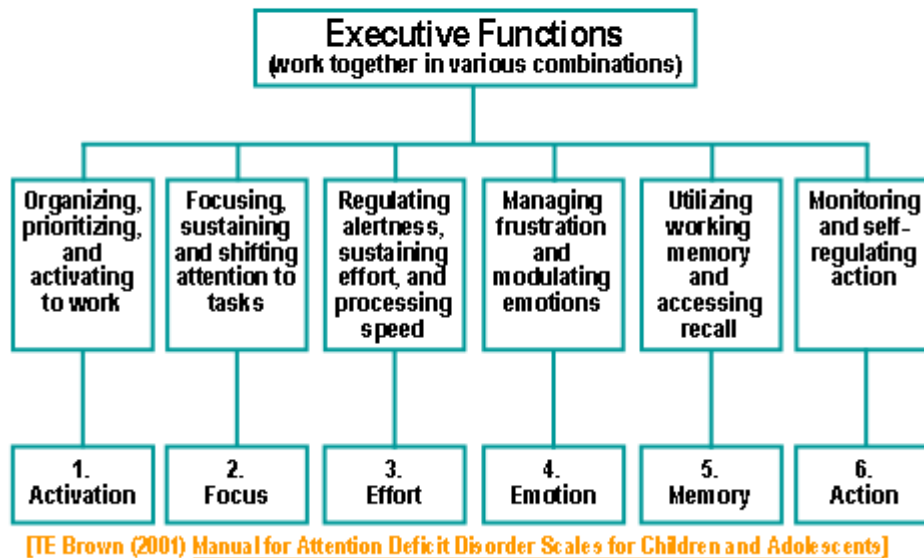


Figure 2.5 Brown's model of ADHD (Brown, 2001)

Accordingly, Brown (2005) clusters the executive functions in the following groups:

2.10.3.1 Activation

Activation refers to the individual's ability to organise tasks and materials, estimate time, prioritise tasks, and get started on assignments. ADHD individuals report chronic difficulty with excessive procrastination as they often postpone getting started on a task until the very last minute, even on a task they realise to be very important to them. It seems that ADHD individuals are unable to commence with a task until it is perceived as an emergency.

2.10.3.2 Focus

The ability to focus refers to focusing, sustaining focus and shifting focus to assignments or tasks. Brown (2005) found that some ADHD sufferers reported to be easily distracted, not only by things that are going on around them, but also by thoughts in their own minds. In addition, focussing on reading assignments poses difficulties to

many of them. When doing reading assignments, ADHD learners may understand the words they read, but they often have to read the words repeatedly in order to fully grasp the meaning and remember it.

2.10.3.3 Effort

This cluster of executive functions refers to regulating alertness, sustaining effort and processing speed. According to Brown, many ADHD learners can perform short-term projects well, but they have greater difficulty with sustained effort over longer periods of time. These learners also find it difficult to complete tasks on time, especially when required to do expository (a detailed description of a theory or problem) and creative writing. Some may even experience difficulty regulating sleep and alertness. Parents will find that they often stay up too late because they are unable to shut their brains down, and once asleep they often sleep in the delta (deep) sleep phase and have difficulty rising in the morning (Brown, 2007).

2.10.3.4 Emotion

Emotion as an executive function refers to both managing frustration and modulating emotions. Although DSM-IV-TR does not recognise any symptoms related to the management of emotion as an aspect of ADHD, Brown's study found that many individuals with this disorder experience difficulties managing frustration, anger, worry, disappointment, desire, and other emotions on a continuous basis. They find it difficult to get an emotion into perspective, to put it to the back of their mind, and to get on with what they need to do (Brown, 2002).

2.10.3.5 Memory

This refers to utilising the individual's working memory and recalling information. ADHD learners may often have adequate or exceptional memory of things that happened long ago, but they have great difficulty remembering where they just put something, what someone just said to them, or what they were about to say. This can

have a great influence on the ADHD learner's academic achievement. These learners often complain that they cannot recall information from their short term memory when they need it (Brown, 2007).

2.10.3.6 Action

This cluster refers to the ability to monitor and regulate one's actions. Many ADHD learners, even those without problems of hyperactive behaviour, experience ongoing difficulties in regulating their actions. According to Brown they are often too impulsive in what they say or do and in the way they think, causing them to jump too quickly to inaccurate conclusions even before the teacher has fully explained a concept. These learners may also experience problems in monitoring the context in which they are interacting. They do not notice when other people are confused, hurt or annoyed by their words or actions, and they hence fail to modify their behaviour in response to specific circumstances (Brown, 2007).

These clusters function in an integrated and dynamic way to accomplish a wide variety of tasks. Brown (2007) asserts that these executive functions do not continually function at peak efficiency for any learner and that all learners have difficulty with some of the functions from time to time. However, ADHD learners are substantially more impaired in their ability to apply these functions than other learners at the same age and developmental level. Impairments of these executive functions can be assessed with The Brown Attention Deficit Disorder Scales, normed rating scales for children, adolescents and adults.

2.10.4 The Cognitive Energetic Model

Sergeant (2000, 2003, 2005) and his colleagues have proposed an alternative theory in an attempt to discuss the information processing process in ADHD learners. Their theory is known as the Cognitive Energetic model. Information processing models emphasise both the cognitive and psychophysiological processes that operate in a stage-like manner between stimulus input and response output.

The Cognitive Energetic model proposes that the overall efficiency of information processing is determined by the interaction of three levels: computational or processing factors, state or energetic factors and management or executive control functions (Sergeant, 2005). Furthermore, Sergeant (2000) points out that ADHD learners have a deficiency in one or all of these levels. In keeping with these findings, Massa (2008) argues that because poor inhibitory control is present in a variety of disruptive disorders of childhood and not exclusively in ADHD learners, it should be excluded as the primary cause of ADHD as stated in Barkley's Model of ADHD (section 2.10.2). Processing factors are cognitive mechanisms and can be described as response output which facilitate ability for encoding, searching, decision-making and motor-organisation. Studies of these processes have indicated that there are few deficits of processing at encoding level, but deficits are present in motor organisation (Sergeant, 2000).

The second level of this model consists of the energetic factors or pools. Energetic or state factors are considered to include activation, arousal and effort. At this level the primary deficits of ADHD are associated with the activation pool (Sergeant, 2000) as well as effort. The state factor dysfunctions proposed by this model could be caused by an impaired ability to habituate or adapt to irrelevant environmental stimuli. Habituation can be seen as the dampening of arousal and activation (Massa, 2008). If a learner is unable to habituate or has a slowed ability to habituate, he would have fluctuating levels of arousal and activation which would in turn impact on the attentional focus as well as the learning and memory processes. In the case of ADHD learners, this could explain behaviour seen by teachers and parents as hyperactivity and impulsivity.

Management factors or executive functioning is at the third level and includes the control processes which comprise executive functions, working memory, goal directed behaviour and planning. According to Sergeant (2000) some of the executive functions may be intact while others are deficient in ADHD learners. Learners with ADHD have impaired working memory which affects their ability to monitor errors and make decisions in order to adjust their behaviour.

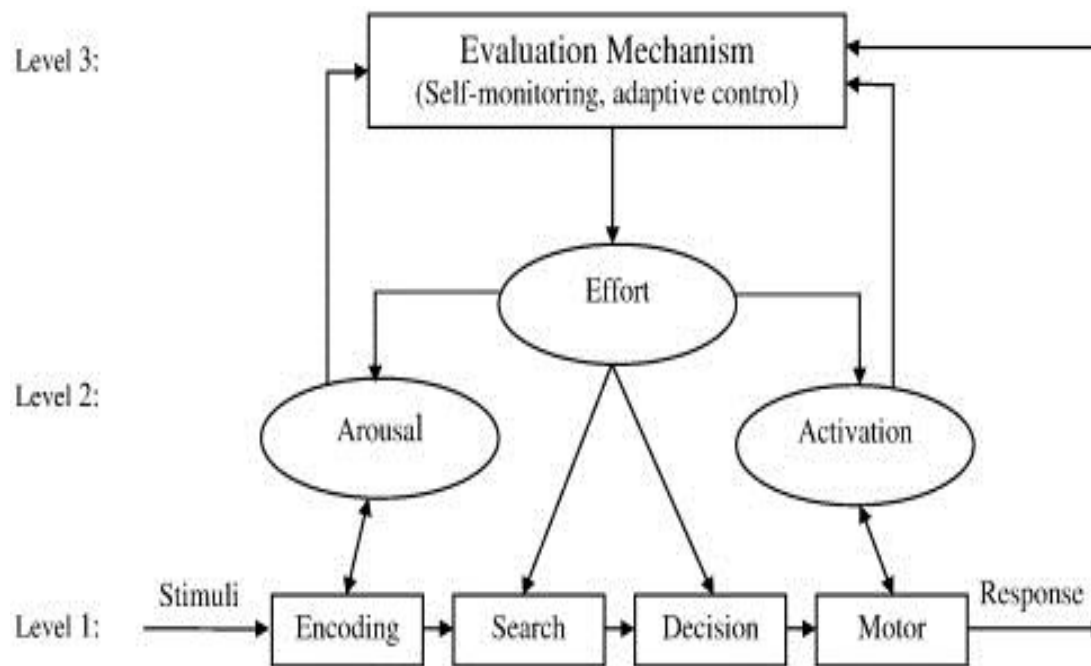


Figure 2.6 Cognitive-Energetic Model of ADHD (Sergeant, 2005)

Sergeant (2005) contends that increasing evidence suggests that inhibition deficits associated with ADHD may be explained in terms of an energetic dysfunction. In contrast to Barkley's Model of ADHD, this model posits that there may be certain aspects of inhibition which are deficit in ADHD learners, but which are also dependant on the energetic state of the learner (Sergeant, 2000). This model asserts that behavioural inhibition deficits in ADHD learners may be due to poor stimulation of inhibitory and activation systems as opposed to a deficiency in these systems. Schatz and Rostain (2006) are of the opinion that it might be further hypothesised that nonspecific anxiety and arousal in ADHD learners divert attention from focused tasks which can explain the poor behavioural activation. Teachers can therefore benefit from knowledge of this model as it may serve as a guide for starting activities in a way that stimulates the ADHD learner in order to turn the focus of the learner to the activity at hand.

2.10.5 Ecological Theory (also known as the Conceptual Framework of Education)

Bronfenbrenner's Ecological Theory holds that 'development' is influenced by several interacting environmental systems which include the micro-system, the meso-system, the exo-system and the macro-system (Bronfenbrenner, 1989). The core conceptual underpinning of the ecological model is that human development is a function of the influences from all of these systems, and that there is a relationship between the systems (Bronfenbrenner & Evans, 2000). These systems serve as a conceptual framework for teachers in order to understand their influence on the academical and social development of the learner. In keeping with these findings, Lopes (2008) argues that the ecological model is a theory which posits that environment, as perceived by the individual, will influence behaviour and development. Therefore, how a learner perceives the environment in the classroom, as opposed to how it may exist in reality, will influence the learner's behaviour and academical development. Likewise, how a teacher experiences learners within the classroom may influence her own development and behaviour. It is important to note that growth and development referred to within the ecological model does not refer to the conventional psychological processes which include perception, motivation, learning and thinking (Lopes, 2008). In the ecological model they rather refer to the content that is perceived, feared, desired, acquired as knowledge and thought about, as well as how the nature of this changes as a function of the individual's experience to interact with the environment. Thus, the ADHD learner relies on her perceptions of her environment and the systems that exist within, for human growth and development to occur. How the learner experiences the school (classroom, peers, teacher, school environment and culture) can influence her development. The ecological model focuses on the relationships between individuals such as the learner and teacher, viewing different levels of systems of the social environment as systems where the functioning of the individual as a whole is dependent on the interaction between all the systems. Bronfenbrenner (1989) proposed that these systems are bi-directional in nature as they are continually influencing us, and we in turn are continually influencing them. As the classroom and teacher impact on the ADHD learner, so does the ADHD learner have an impact on the teacher. For the purpose of my study, the model can be viewed as follows:

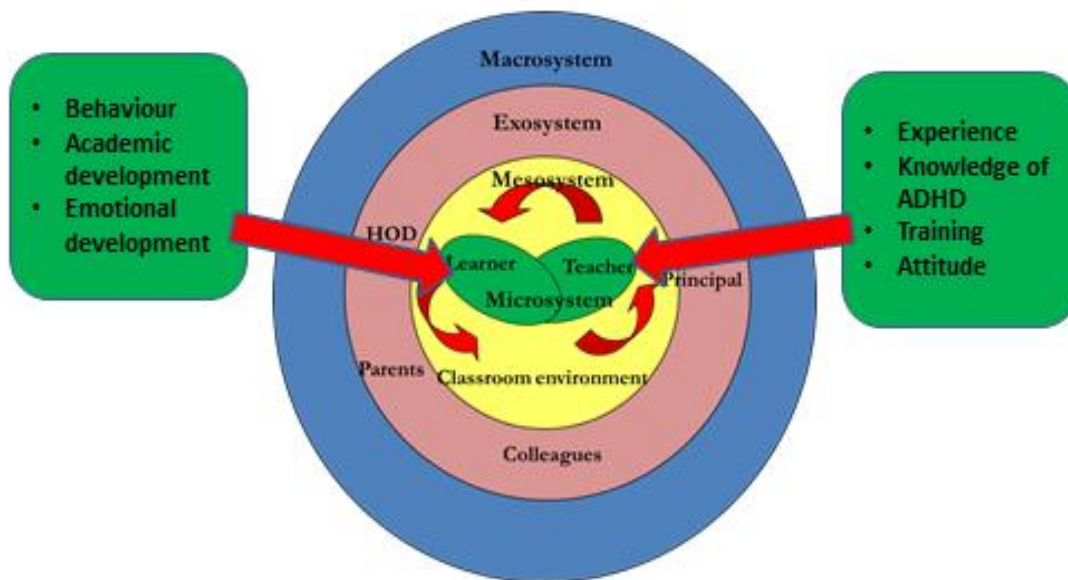


Figure 2.7: Bronfenbrenner's Ecological Model (adapted)

(a) Micro-system

This refers to the immediate surroundings of the individual. The micro-system is a blueprint of activities, roles and interpersonal relations experienced by the learner in a given context or setting (Bronfenbrenner, 1989). Within the micro-system the most direct interactions with social agents take place; with parents, peers, and teachers, for example. The individual is not merely a passive recipient of experiences in these settings, but someone who actually helps to construct the social settings.

The teacher and ADHD learners are placed at the core of this study, thus in the context of this model they are viewed as the role players in the micro-system. The factors within this system which may influence the management of ADHD learners may include the teacher's experience, knowledge, training and attitude towards ADHD and learners with ADHD (Jones, Dohrn & Dunn, 2004). Therefore teachers' knowledge and training regarding ADHD may influence their instructional practices and classroom management as well as how they

experience ADHD learners in their classrooms (Barkley, 1994; Jones et al., 2004). A better understanding of what ADHD is and how it impacts on the behaviour and academical development of the learner, could improve the teachers' attitude and management of ADHD learners. In turn, should the teacher guide and assist the ADHD learner towards academic success, frustration levels may drop and the learner's self-confidence and relationship with the teacher may improve.

(b) Meso-system

Bronfenbrenner (1989) points out that the meso-system includes the interrelations between two or more contexts wherein the person participates. This refers to the relations between the different micro-systems or connections between contexts, such as the connection between family experiences and school experiences. For example, learners whose parents have rejected them may have difficulty developing positive relations with both teachers and peers. For the purpose of this study the classroom environment is seen as the major factor in the meso-system. The classroom environment consists of all learners (including ADHD learners) and the teacher. Classroom management may influence the classroom environment which impacts on the ADHD learners' development. Thus, the teacher's ability to manage the classroom effectively is important as all learners are reliant on the teacher for teaching so that they may learn and develop.

(c) Exo-system

In the exo-system, two or more settings interact but do not necessarily involve the individual directly, but the individual is affected by the events or what happens within the settings (Bronfenbrenner, 1989). For example, a teacher's partner might receive a promotion that requires more travel with resultant conflict at home, which in turn might affect patterns of interaction with the learners in the classroom. In the educational context, the Head of Department may influence the teachers by supporting and guiding them in managing ADHD learners. The principal, Head of Department and the teacher's colleagues can be seen as the exo-system as they will impact on how teachers experience and manage ADHD in their classrooms. Furthermore, Bronfenbrenner states that parent involvement

extends to the school and the classroom level as parent involvement and cooperation can ensure that the learner with ADHD obtains the correct medical treatment and therapy.

(d) Macro-system

The macro-system is viewed by Bronfenbrenner (1989) as the overarching ideology and organisation of social institutions that are found in a culture, i.e. the ways of people. Cultural contexts would include socioeconomic status, poverty, and ethnicity. In the educational context the macro-system could include the community where the school is situated, education specialists and the Department of Education. According to this theory the systems are intrinsically intertwined which implies that alterations occurring on one level have the potential to affect the entire system. Therefore, both the teacher and ADHD learner's development and growth are dependent on the interaction between the systems and the relationships that develop between them.

The ecological theory is one among the many different theories related to human development. It emphasises environmental factors as playing the major role in development. This theory, however, varies from culture to culture.

2.10.6 The Medical Model

A current trend in the mental health system is toward understanding psychological issues according to a medical model. The medical model proposes that disruptive behaviour is the result of maladjustment in learners who need to be referred to learner guidance clinics for therapy (Jones 2003). Jones further argues that ADHD is a brain dysfunction to be treated with medication that changes the biology of the brain. Hence this model presents ADHD as a brain dysfunction to be treated with medication that changes the biology of the brain (Honos-Webb 2005). The treatment of learners with ADHD, ODD (oppositional defiant disorder) and CD (conduct disorder) requires specialised pharmacological management (Rapport et al., 2001). Bouwer (2006) warns that the medical model holds the danger of categorising or labelling learners in terms of a gross over-emphasis of the impairment or learning disorder. According to this model, disruptive behaviour is understood as

“maladjustment,” and thus as a function of psychopathology which requires the learner to be removed and placed in a “treatment environment” (Jones 2003). Schools seek to resolve problems of disruptive behaviour by referring learners to a more appropriate environment for therapy by trained psychiatrists, paediatricians and general practitioners (Cooper et al., 1994). It is argued that behavioural problems, by their very nature, disrupt the “normality” of the environment in the mainstream classroom and that the school has the right and duty to create an environment for quality learning, even if it has to exclude these learners from the classroom.

Thus, the premise of the medical model is that learners who display negative or disruptive behaviour do so because of a mental illness or brain dysfunction which compels them to be referred to health practitioners for treatment and rehabilitation. This implies that the solutions to problems arising from disruptive behaviour are to be found in medical psychology, which is associated with psychiatry and paediatrics and is informed primarily by psychoanalytical thinking (Jones 2003). In summary, the fact that the majority of behaviours associated with ADHD is considered a medical disorder conveys the expectation to parents, learners, and teachers that behaviour should be unchanging, constant, and improved by medicine only. In many ways, the diagnosis creates an expectation that manifests in the very symptoms it sets out to describe. In contrast to the medical model, the educational model firmly asserts that the school is sufficiently equipped to manage learners with difficult behaviour without the need for medical intervention (Jones 2003). This critique of the medical model, particularly by the proponents of the educational model, purports to discredit the dominance of mental illness that originated in the Freudian paradigm and empower the rehabilitation of disruptive learners by the school, rather than through health agencies (Jones 2003). Jones (2003) furthermore points out that Educational Sociologists indicate that the vested interests of mental health agencies lead to practices that stigmatise and discriminate against learners who, for various reasons, are regarded as difficult in the classroom and at school. Research findings indicate that as a result of this discrimination, the medical model effectively marginalises the role of both teachers and school practitioners. Since behavioural psychology emphasises the fact that behaviour is learned, teachers are well-equipped to assist ADHD learners with behavioural problems to learn new and more appropriate behaviour (Singh 2012). I believe that teachers play a pivotal role in

observing and identifying learners who display ADHD associated behaviours in their classrooms. They should also employ the various management strategies and use the school's code of conduct and special needs policies to address ADHD learners' behavioural disorders and academic barriers. This is in line with the "inclusive education principle" which asserts firmly that every learner, irrespective of his or her disabilities, handicap or disruptive behaviour, has the right to be educated alongside his or her peers in a normal school environment (Singh 2012). The inclusion of learners with severe behavioural and learning barriers in the mainstream classroom, previously described as unsuitable for the education of such learners, raises the profile of behavioural psychology in the behaviour modification of the child. "Difficult" learners working alongside high achievers can benefit from this positive association by studying together, sharing class notes and working on assignments together, thus getting encouragement from their more capable counterparts to focus more on academic achievement and less on disruptive behaviour (Shaffer & Kipp, 2010).

All these models have valid theoretical foundations and assist greatly in understanding ADHD. The following table presents a summary of the main tenets of each model:

Table 2.1: Summary of models discussed

Model	Characteristics
Conceptual Model	<ul style="list-style-type: none"> • ADHD results as a primary deficit in the working memory • Learners cannot manipulate, construct and maintain information • Learners will avoid tasks which place demands on working memory such as solving problems and organizing information • Deficit in working memory can cause learners to redirect their attention to negative stimuli
Barkley's Model	<ul style="list-style-type: none"> • Primary deficit of ADHD is the lack of

	<p>self-regulation and inhibition</p> <ul style="list-style-type: none"> • Motivation of the ADHD learner is weak • Learner cannot sustain goal-directed behaviour
Brown's Model	<ul style="list-style-type: none"> • Postulates impaired cognitive executive functions in ADHD learners • ADHD is not a behavioural disorder • ADHD learners will experience impairments in the management system of the brain • Learners cannot manage daily tasks such as time management, sustaining and shifting focus, sustaining effort, managing emotions and recalling information from short term memory
Cognitive-Energetic Model	<ul style="list-style-type: none"> • Efficiency of information processing is determined by the interaction of three levels • ADHD learners have a deficiency in one of these levels • Apart from behavioural inhibition deficits, the energetic state of the learner is important
Bronfenbrenners' Ecological Theory	<ul style="list-style-type: none"> • Development is influenced by interaction of environmental systems • The influences from these systems and their relationships will determine human development • How ADHD learners experience the classroom, will influence their behaviour and academical achievement

Medical Model	<ul style="list-style-type: none"> • ADHD is a brain dysfunction • ADHD must be treated with medication • Disruptive behaviour is understood as a maladjustment • The ADHD learner must be referred to health practitioners
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As a mother of an ADHD child and a teacher, I believe that both Brown's Model of ADHD and Bronfenbrenner's Systems Theory can be helpful to teachers in understanding the behaviour of the ADHD learner and managing it. Brown's Model of ADHD can explain academic problems, thereby guiding the teacher in managing these learners as well as helping them to perform optimally. As good relationships between the teacher, the learner and their parents are important, I am of the opinion that Bronfenbrenner's Ecological Theory can provide valuable guidance and understanding to both parents and teachers regarding their attitude and actions towards these learners. The Medical Model might pose the risk of teachers feeling that ADHD can only be controlled with medication, and they may as a consequence make no effort to assist these learners.

Apart from the discussed theories and models, various other models of ADHD and ADHD behaviour have been explored in order to understand the disorder and its impact on the learner and the teacher. According to the *biopsychosocial model*, research reveals a moderate degree of heritability for delinquency, disruptive and antisocial behaviour from childhood to adulthood (Dodge & Pettit 2003). Furthermore, the *educational model* states that emotional and behavioural difficulties such as ADHD behaviour is the domain of teachers who can make profitable use of systemic insights and particular intervention techniques to modify the behaviour of disruptive learners (Jones 2003). The *teaching pyramid model* concurs with the educational model in that it proposes a three-tiered model of classroom management strategies for promoting the social-emotional development of all learners, including learners with ADHD (Fox, Dunlap, Hemmeter, Joseph & Strain 2003). The *action research model of consultation and collaboration* posits that all stakeholders of the school system are involved in the learner's rehabilitation. This model suggests that

behavioural consultation and collaboration among all stakeholders of the school system (administrators, teachers, parents, school staff, human service professionals, mental health consultants, school psychologists and other community stakeholders) is an essential process in the attempt to guide and develop learners with ADHD (Conwill, 2003). It becomes clear from various educational and ADHD models that various interventions can be implemented to improve the development of ADHD learners on all levels of their lives.

2.11 SUMMARY

ADHD is characterised by poor attention and concentration, impulsiveness and hyperactivity before the age of seven years. ADHD symptoms must persist for at least six months before the condition can be diagnosed in a learner. Statistics revealed that ADHD is more prevalent in boys than girls. Long-term and follow-up studies have shown that 80 % of learners who are diagnosed with ADHD during childhood continue to suffer from ADHD as adolescents (Holtz & Lessing, 2002). ADHD symptoms do not necessarily fade with maturity.

Treatment of ADHD seems to be a controversial subject as none can cure the problems associated with ADHD. Treatments of ADHD only alleviate the problems experienced by ADHD learners while the treatment is active. Brown (2007) argues that improvement produced by stimulants can be observed within thirty to sixty minutes after a dose has been administered. As soon as the medication has worn off, the ADHD symptoms generally reappear to their former level.

This chapter has highlighted that children with ADHD experience a myriad of challenges and difficulties, particularly with regard to their academic performance and social skills. Learners with ADHD will usually have a short attention span, are easily distracted and may also be hyperactive and impulsive. Considering that Foundation Phase school teachers are often the first to notice behavioural and learning difficulties in children, it is surprising that relatively little research has assessed Foundation Phase teachers' knowledge, attitudes and behaviour toward this disorder, especially in South Africa. The knowledge levels of and training provided to South African teachers remain an area of concern.

Extensive research has been done internationally and tools made available to diagnose ADHD. However, tools for managing ADHD in the classroom are not yet available to South African teachers. The focus is on learners' academic achievement which should be closely monitored over time to determine their response to the medication.

Over the years many teachers have stated that ADHD is an excuse for learners with behavioural problems. Brown (2007) argues that this is a myth and that, to the contrary, very few ADHD learners have behavioural problems. Furthermore, he points out that chronic inattention symptoms may cause severe and longer-lasting problems for learning and relationships with peers and teachers, compared to learners without this problem. In spite of findings like these, ADHD learners pose a challenge to teachers which can be stressful and exhausting. Teachers and parents dealing with ADHD learners need to have high levels of understanding, knowledge and tolerance towards them.

Several policies and Acts are in place within the Educational system in South Africa to guide schools and teachers on inclusion of learners with learning barriers. Unfortunately the intentions of the movement towards inclusive education have not been entirely realised in South Africa. Dale-Jones (2014) points out that The Education White Paper 6 (2001) has never been promulgated into an Act, thus it only serves as a reference guide to schools which cannot be enforced. The recent amendments made to the National Education Policy Act, 1996 (Act no 27 of 1996) during May 2014 should rectify this situation.

Inclusive education is becoming a reality in South Africa. It will challenge teachers who are not trained to teach learners with ADHD and other disabilities. This is also the view of Dalton, Mckenzie & Kahonde (2012) who argue that despite the development of inclusive education policies to address exclusion of learners with learning disorders or disabilities, one of the pivotal issues hampering progress is the lack of teacher skills in adapting the curriculum to meet a range of learning needs.

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

Chapter 2 provided an in-depth theoretical foundation of ADHD, the impact of the disorder on learners and teachers as well as a study of the literature on managing ADHD learners. Against this background, this chapter highlights the research design and research methods used in the empirical investigation phase of this study. I intend to bring about the context in which, and purpose for which, the collection of data has taken place. I also provide an account of how the qualitative investigation was designed and conducted. The chapter further covers the method of investigation which includes the data-gathering techniques and design of the research. The validity and reliability of the data collected, together with the measures implemented to ensure trustworthiness, are also explained. In addition, the ethical measures considered are highlighted. The main research question guiding this study as well as the aim and objectives of the study, are stated. My role will also be detailed in order to clarify ethical research proceedings.

3.2 RATIONALE FOR EMPIRICAL RESEARCH

I have been working in the field of tertiary education for approximately 15 years and have experienced the dramatic effect of ADHD on young adults. As a mother of an ADHD child, I have developed a limited understanding of the impact of ADHD on the child's life, both academically and psychologically. During this process I witnessed the frustration levels of teachers dealing with ADHD sufferers in the classroom. I believe that, by identifying ADHD during the early developmental stages of a child, the effects on both children and teachers can be minimised drastically and may result in a better quality of life for those affected.

3.3 RESEARCH QUESTIONS AND AIM

The over-arching aim of this study was to investigate the impact of ADHD on teaching and classroom management in the Foundation Phase at selected primary schools. In the final

chapter, I will endeavour to answer the research questions set out in chapter one, which read as follows:

- What is the stance of the DoE on ADHD as reflected by its official documents, and how, according to their documents, are inclusive classroom strategies implemented?
- What are teachers' knowledge levels of ADHD?
- How do teachers deal with ADHD-related behaviour such as inattention, hyperactivity, impulsivity, daydreaming and depression?
- Which strategies can be implemented by teachers to effectively address the impact and effects of ADHD in their classrooms?
- What support systems are in place for teachers to deal effectively with learners diagnosed with ADHD?

3.4 RESEARCH DESIGN

A research design is seen as a framework or plan of how one intends to conduct the research process to solve the research problem (Babbi & Mouton, 2002). A research design can also be seen as the plan and structure of the investigation used to obtain evidence to answer research questions (McMillan & Schumacher, 2010). In other words, design indicates how the research is set up, what happens to the subjects and what methods of data collection are used.

In conducting this empirical investigation a qualitative research design was used. I chose this approach because it provided a clear understanding of the participants' views and experiences and it captured the participants' perceptions as they occur naturally (Wiersna & Jurs, 2004) and in their own words (Johnson & Christensen 2011). According to Bazeley (2007) qualitative methods are chosen in situations where a detailed understanding of a process or experience is needed, where more information is needed to determine the exact nature of the issue being investigated, or where the only information available is in non-numeric form.

This study was both of a qualitative and phenomenological nature (McMillan & Schumacher, 2010) which allowed me to gather data through face-to-face interviews with the selected teachers of five primary schools and a DoE representative in their natural settings in the Lejweleputswa District of the Free State. In addition, the research was phenomenological in nature because I directly approached the phenomenon itself to make sense of the participants' perspectives, feelings, thoughts, beliefs, ideals and actions in natural situations (McMillan & Schumacher, 2010). The purpose of adopting this approach was to ascertain first-hand the responses of both the DoE and educators to ADHD related behaviour, management challenges in the classroom as well as support from the Department of Education and Schools.

The research design was also constructivist because it focussed on the perspectives, feelings and beliefs of the participants (McMillan & Schumacher, 2010). Participants formed constructions to make sense of their world and reorganised these constructions as viewpoints, perceptions and belief systems. The participants' perceptions were what they considered real and what directed their actions, thoughts and feelings (McMillan & Schumacher 2010). In line with the central perspective of constructivism or naturalistic inquiry (Creswell, 2012), I considered the participants' views, described them within a natural setting or context (i.e. the classroom) and explored the views participants held about the problem of ADHD management in the Foundation Phase of primary schools. This was achieved through social interaction (an individual interview and five focus group interviews) with participants in a social setting (the school).

The design also involved an interpretive perspective as it was primarily concerned with meaning and it attempted to ascertain people's understanding of a particular social phenomenon, in this instance management of ADHD learners and associated behaviours in the Foundation Phase classroom (Henning, Van Rensburg & Smit, 2004). The interpretive paradigm involves taking people's subjective experiences and making sense of them by interacting with them and listening carefully to them. It involves understanding the research participants' "inner worlds" (that is, their subjective worlds) and subsequently to provide a valid, accurate account of the participants' perspectives (Johnson & Christensen, 2011). From an interpretivist perspective, the typical characteristics of the phenomenological

method are that it strives toward a holistic understanding of how participants relate, interact with and make meaning of a phenomenon (McMillan & Schumacher, 2010). Since they deal with ADHD cases on a daily basis in their classrooms, respondents gave a clear indication of their classroom practices and knowledge of ADHD as well as the difficulties they encounter. For this study I decided to conduct in-depth focus group interviews with the Foundation Phase teachers. These interviews were conducted in order to capture their knowledge of ADHD as well as their perspectives on how educators currently deal with these learners at school. Questions were semi-structured and open-ended to provide the participants with every opportunity to describe and explain what is most salient to them. Verbatim words and phrases from the interviewees were then analysed and used as data to illustrate findings.

3.5 MY ROLE AS RESEARCHER

In qualitative research, the researcher is directly involved in the setting, interacts with people and is the “instrument” (De Vos, 2005). In any study, it is important to explain the role of the researcher for clarity and role identification purposes. I served as an instrument in this study since I collected and collated all the responses of participants. As a researcher, I understood the need to ensure that I was competent, skilled and adequately prepared to undertake the proposed investigation (McMillan & Schumacher 2010). I had to avoid bias by not engaging in selective observations and selective recording of information (Johnson & Christensen, 2011). In order to ensure competency and avoid researcher bias, I undertook to:

- pay attention to the participants’ own words and to transcribe the interviews verbatim;
- remain sensitive to the emotions and feelings of the participants at all times, since the participants under study came from diverse cultural and linguistic backgrounds and varying age groups, experiences and ideologies. Goddard and Melville (2001) point out that the researcher should remember that the subjects are individual human beings, and they should be treated with appropriate respect;

- avoid bias and subjectivity with regard to achieving an understanding and rapport with the participants and the interpretation of their data by maintaining a neutral stance during the entire interview process;
- maintain objectivity with the participants at all times by not influencing their perceptions and not making value judgements that might bias the research findings. According to Walliman (2001) the researcher should avoid leading questions, excessive guidance and other factors which may cause distortion;
- familiarise myself with the interview guide (wording, format, recording procedures and allowable probes);
- conduct the interview in a courteous and professional manner throughout the interview process (Creswell 2012).

3.6 RESEARCH METHODS

3.6.1 Ethical measures

With regard to the data collection process, I considered certain important issues, such as legal issues, technical accessibility and ethical issues (McMillan & Schumacher, 2010). The following is a discussion of the ethical measures I took throughout the research process in order to guide and assist the empirical investigation (Johnson & Christensen, 2011).

3.6.1.1 Informed consent

Before conducting this study, I obtained permission from the Research Directorate of the Free State Department of Education to conduct research at the five primary schools (Appendix B). I also obtained permission from the school principals before scheduling and conducting interviews to collect data, since obtaining permission from organisational personnel requires contacting them before the study commences (Creswell, 2012). In addition, informed consent from all the prospective participants (principals, teachers and the DoE official) (Appendix E,F & G) to participate in the study was obtained, after having informed them of its purpose, the procedure to be followed, benefits, and the measures

implemented to ensure confidentiality (Johnson & Christensen, 2011). Thus, permission was requested and granted by all the relevant role-players before the commencement of the interviews.

3.6.1.2 Voluntary participation

McMillan and Schumacher (2010) believe that participants cannot be compelled, coerced or required to participate in a study against their will, therefore all participants were informed that their participation in the study was completely voluntary. Participants were also informed that the freedom to participate or not to participate is a basic right, and it includes the right to withdraw from the research at any time without penalty, should they feel uncomfortable (McMillan & Schumacher, 2010). In this way, I ensured that pressure to participate or to remain a participant was not applied and the participants were not exploited in any way, thereby upholding the highest ethical standards. Accordingly, my thorough understanding of ethical principles and procedures that were applied stringently, helped to prevent any abuses that could have occurred (Johnson & Christensen, 2011).

3.6.1.3 Anonymity and confidentiality

All participants were assured that any information provided by them would be held in strict confidence and that their identities would not be revealed in any record or report. I also explained that there would be no link between the data and the participants in any reports (McMillan & Schumacher, 2010). Therefore, the participants were requested not to include their names and addresses, nor the names and addresses of their schools. In this way confidentiality could be ensured as the data could not be linked to individual participants by name. I used code names for people and places to ensure anonymity. In this way, neither the names of participants who provided the information, nor their identities are known to anyone, and their privacy is duly protected (McMillan & Schumacher, 2010).

3.6.1.4 Permission to tape-record interviews

As mentioned before, I used the qualitative interview approach to gather information-rich data about the participants' thoughts, beliefs, knowledge, reasoning, motivations and feelings about ADHD learners in their classrooms (Johnson & Christensen, 2011). In order to capture this without missing any vital information, all the interviews were tape-recorded. I informed all participants before commencing with the interviews that their responses would be tape-recorded and that they had the right to withdraw from the study if they felt uncomfortable or intimidated by the presence of the tape recorder. Thus, the taping of the interviews never proceeded without the knowledge and consent of the participants. In this way I avoided deception and upheld the highest level of professional integrity and objectivity (McMillan & Schumacher, 2010).

3.6.2 Measures to ensure trustworthiness and subjectivity

Qualitative research should respond to concerns that the natural subjectivity of the researcher will shape the research (Gay et al., 011). When qualitative researchers consider research validity, they usually refer to qualitative research that is plausible, credible, trustworthy and therefore defensible (Johnson & Christensen 2011). In this study, Lincoln and Guba's model for ensuring the trustworthiness of qualitative data was employed according to the following four criteria (Poggenpoel, 1998: 349-351):

- The truth-value (credibility) determines how confident the researcher is that his findings are a true and accurate account of the phenomenon that was studied. To maintain credibility, I ensured that the information gleaned from all the participants was recorded and analysed accurately.
- Applicability (transferability) indicates the extent to which the findings from the study apply to other settings, contexts or groups. To ensure applicability, sufficient descriptive information was presented in this study that may be of use in future research.
- Neutrality (confirmability) refers to the freedom from bias and subjectivity in research procedures and findings. I attempted to remain objective throughout the

process, guarding against subjectivity and bias which could have influenced the interpretation and description of data. In order to achieve this, I engaged in member checking which involved taking the interpretations and descriptions of the data analysis back to the research participants to verify its accuracy and credibility. The transcribed data were submitted to the participants to double-check that all the transcripts were authentic and recorded accurately.

In addition to the above, the following strategies were used to ensure trustworthiness in this research:

3.6.2.1 Prolonged data collection

Data was collected over a relatively long period of time since a lengthy data collection period provides opportunities for interim data analysis, preliminary comparisons and corroboration to refine ideas. It also ensured a match between evidence-based categories and participant reality (McMillan & Schumacher, 2010). The schools were visited before the interviews, during the interviews and again after the interviews to ensure that the information transcribed from the recordings was correct and to clarify information that appeared vague.

3.6.2.2 Participants' language

In order to avoid sophisticated language or abstract social science terms, the interviews were conducted in the participants' language of teaching and learning, which in this case was both English and Afrikaans (McMillan & Schumacher, 2010). Simple language was employed to ensure optimal understanding on the part of the participants.

3.6.2.3 Field research

The interviews were conducted and observations made in the natural setting of the schools to accurately reflect the reality of life experiences. This allowed their responses to reflect

their lived experiences of ADHD and ADHD learners in their classrooms (McMillan & Schumacher, 2010).

3.6.2.4 Disciplined subjectivity

I have been made aware of researcher bias that is a potential threat to validity, resulting from selective observations and selective recording of information, and also from allowing one's personal views and perspectives to affect how data are interpreted and how the research is conducted (Johnson & Christensen, 2011). I ensured that the analysis of the interviews was conducted objectively and I monitored myself constantly for both subjectivity and bias throughout the process. During the interviews and immediately thereafter I made notes with regard to emotions, gestures, levels of emphasis and any kind of sensitivity displayed by participants.

3.6.2.5 Mechanically recorded data

Since tape recorders and other audio-visual equipment provide accurate and relatively complete records of conversations between people (McMillan & Schumacher 2010) it was decided, for the purposes of this study, to use a digital voice recorder to record the interviews.

3.6.3 Data collection

According to Creswell (2012) the data collection phase involves identifying and selecting individuals for study, obtaining their permission to be studied and gathering information by administering instruments which entail asking them questions or observing their behaviour. I chose the interview method of data collection because it could be done face-to-face and it essentially involves an in-depth discussion by the participants on a particular topic or set of issues (Wilkinson, 2004). The strength of this method was that it allowed for probing of the participants to clarify responses or gain additional information (Johnson & Christensen, 2011).

Accordingly, I used focus group, semi-structured interviews and an individual interview in this phase of the study. I asked open-ended questions to allow the participants to voice their experiences best in an unconstrained manner, thus allowing the participants sufficient opportunities to formulate their responses (Creswell, 2012). Where necessary, answers to questions were probed and follow-up questions were asked to seek clarity and to glean more information from the respondents. The questions asked were designed to answer the research questions.

3.6.3.1 Sampling

A purposive sampling method was used. According to Babbi and Mouton (2002) purposive sampling is done when “...you select your sample on the basis of your knowledge of the population, its elements and the nature of your research aims”. For the purpose of this research I selected information-rich participants (Foundation Phase teachers and the Subject Advisor (SA) of the Foundation Phase) for in-depth study since they could provide both the best information as well as first-hand experiences to address the problem under investigation, which is ADHD in the Foundation Phase (McMillan & Schumacher, 2010:). I purposefully selected five primary schools in the Lejweleputswa Education district as sites to conduct the investigation. The sample consisted of the following participants:

- One representative of the Department of Education (SA of the Foundation Phase) was interviewed individually (the management perspective).
- All Foundation Phase teachers from each of the five primary schools were interviewed as a focus group (the teacher perspective).

The principal from each of the schools assisted in selecting the participants for the focus group interviews with teachers. The teachers were selected in terms of different age groups, and most importantly, based on their first-hand experience of Foundation Phase teaching.

The interviews were conducted at a convenient time and place and were negotiated with the respondents well in advance. The interview with the SA was conducted in her office and those with the teachers were conducted in each of the schools' staffrooms. I ensured that

the settings for the interviews were warm and inviting, easily accessible to participants and suitably quiet. I established a good rapport with the participants by outlining the purpose and aims of the research and by thanking them for their time and involvement. Participants were reassured that strict confidentiality of their details would be maintained and they gave their permission for this research by signing consent forms (see Appendix E, F & A). The interviews were digitally-recorded with the participants' permission and transcribed verbatim.

3.6.3.2 Pilot study

In order to test whether the questions to be asked in the study were clear and unambiguous before using them in the actual research interviews, a pilot study was conducted (MacMillan & Schumacher, 2010). The pilot study was conducted informally with a group of educators from a primary school which was not included in the sample. The purpose of the pilot study was to test whether the questions asked were relevant, appropriate and in line with the problem being investigated. Furthermore, the aim of the pilot interview was to find answers to the following questions:

- Are the questions easy to follow?
- Are the questions relevant to what the research aims to accomplish?
- Is there a good flow of questions in the interview guide?
- How long does it take to answer the questions?

Their responses assisted in confirming the questions for the interview schedules for the SMD (interview) and Foundation Phase educators (focus groups).

3.6.3.3 Interview schedule

I compiled an interview schedule with a list of semi-structured questions to be asked during the interview (McMillan & Schumacher 2010). The pilot study guided the types of questions that were to appear in the interview schedule that consisted of:

- eleven questions for the SA; and
- eleven questions for the teachers.

All the questions were related directly to the objectives of the study and followed a given sequence that was adhered to during each interview. The main written questions appearing in the interview schedule were asked orally in exactly the same order and wording with appropriate probing questions where it was deemed necessary (McMillan & Schumacher, 2010).

3.6.3.4 Field notes

I made field notes throughout the empirical phase of the research with regard to the observations made during the focus group interviews (McMillan & Schumacher, 2010). Descriptive field notes included a description of the interview process and how it unfolded while reflective field notes included my thoughts, insights and hunches as the interview proceeded (Creswell, 2012). Apart from transcribing all the focus group recordings, field notes were made after each focus group interview with regard to the educators' participation, contributions to group discussions and their expressions and attitudes when responding to questions. I also made notes of participants' comments and my tentative interpretations during the data collection and analysis procedures.

3.6.3.5 Data analysis

Qualitative data analysis is primarily an inductive process of organising data into categories and identifying patterns and relationships among the categories. General themes and conclusions emerge from the data rather than being imposed prior to data collection (McMillan & Schumacher, 2010).

Creswell (2012) explains that the data in a qualitative study consists of a text database which is analysed by describing the research site and the participants, as well as screening the data for themes or broad categories representing the findings, and by doing so, enabling the researcher to gain a clear picture of the phenomenon under investigation. This is

followed by interpreting the meaning thereof in relation to existing research, addressing the research questions and reporting the findings through writing a descriptive research report which includes the personal experiences and reflections of the researcher (Creswell, 2012:240. Nieuwenhuis (2007) states that the aim of analysing qualitative data is to understand and interpret the data while keeping the research questions as well as the aims and objectives of the study in mind.

In order to make sense of the data and answer the research questions guiding my study, I followed the steps suggested by Creswell (2012) and Nieuwenhuis (2007) in analysing and interpreting the qualitative data. I prepared the data for analysis by transcribing the audio-taped interviews to typed files. I read the transcripts in their entirety several times in order to form a holistic picture of each interview before breaking it up into smaller parts (Creswell, 2012). While reading through the transcripts to develop a general sense of the data, I made notes of first impressions, ideas and hunches, referred to by Nieuwenhuis (2007:104) as 'memoing'. I tried to keep a clear focus on the research questions throughout the process of data analysis, which was helpful in distinguishing between relevant and less relevant information.

The transcript of each interview was then read carefully to look for the underlying meaning in text segments. These segments were coded by assigning labels to each in the form of words or short phrases accurately describing the meaning of the specific segment (Creswell, 2012; Nieuwenhuis, 2007). From these codes, I looked for emerging themes or categories. This step involved an inductive process where the codes were grouped into broad themes, narrowing the data into six themes. Creswell (2012) explains that these themes present the major ideas in the data which are also labelled by short phrases of two to four words, while McMillan and Schumacher (2010) point out that not all the themes or categories are equally important. Some might be labelled as 'primary themes' while others might be labelled as 'sub-themes' or 'unexpected themes', etc. The themes were then described, including statements from the participants to clarify their meanings (Nieuwenhuis, 2007). Through developing and describing the themes, answers to the research questions started emerging, leading to an in-depth understanding of managing ADHD in the classroom setting. The data was reread to look for new information on each theme. When saturation was reached and

no new information could be added to the themes, I confirmed with the participants that I have adequately interpreted their perceptions (Creswell, 2012). (See Chapter 4 for a detailed analysis of the data).

Creswell (2012) recommends a supplementary thematic analysis by layering and interconnecting the themes, which will add additional insight into the study. Layering the themes involves organising the themes in a hierarchy and working upward from basic themes to more complex ones. Through interconnecting the themes, the researcher looks for relations between themes, for example cause and effect, sequence or chronology (Creswell, 2012). Similarly Nieuwenhuis (2007) recommends structuring of the themes or categories by looking for relationships, commonalities, contradictions, exceptions and so on, while McMillan and Schumacher (2010) encourage researchers to look for patterns in the data by examining the relationships between themes or categories in every possible way, trying to make sense of the complexity of the links between them. I attempted to answer the research questions by displaying the findings visually and constructing a narrative discussion to explain what I have learned from the data analysis.

Nieuwenhuis (2007) suggests making use of a diagram as a visual tool in making sense of the data and presenting it in a way that will enable the reader to follow your line of thinking and interpretation of the findings. The visual representation of the findings should be accompanied by a narrative discussion (McMillan & Schumacher, 2010). Creswell defines this narrative discussion as "...a written passage in a qualitative study in which authors summarise, in detail, the findings from their data analysis" (Creswell, 2012:255). Finally, I interpreted the findings by giving an overview of the findings, comparing it to past research in the literature and personally reflecting on the meaning of the data from my own perspective (Creswell, 2012). Nieuwenhuis (2007) believes that the ultimate aim of data interpretation is to draw conclusions which have to be based on verifiable data, and emphasises that these conclusions are only applicable to the specific study and they can therefore not be generalised (Nieuwenhuis, 2007).

3.7 SUMMARY

Chapter three outlined the research design and methodology used in the empirical phase of this study. The research questions and aim, the ethical measures, the data collection and the data analysis methods used, were explained. In the next chapter the focus is on the practical conducting of the interviews, the interpretation of the data, and the presentation of the results and findings.

CHAPTER 4

DATA ANALYSIS, FINDINGS and INTERPRETATION OF DATA

4.1 INTRODUCTION

In chapter three the research design and methodology used in this study were clearly outlined. Various ethical considerations as well as measures to ensure trustworthiness, as cited in section 3.6.2, were explained in detail. A qualitative approach was followed in conducting this phenomenological study. Five primary schools – three ex-model C schools, one rural school and one private school in the Lejweleputswa Education District - were selected through purposeful sampling and semi-structured focus group interviews were conducted with the Foundation Phase teachers of the selected schools. Initially, my intention was to involve a township school and another private school to balance the sample, but unfortunately the participants cancelled our appointments at very short notice.

The purpose of the interviews was to collect data on the knowledge, experiences and classroom management practices of ADHD learners of Foundation Phase teachers in the participant schools. In addition, an individual, one-on-one interview was conducted with the Subject Advisor (SA) of the Foundation Phase in the district to include a view from the Department of Education. The interviews were recorded and transcribed and the following steps were followed in analysing the data (see section 3.6.3.5 for a detailed discussion):

- The transcribed interviews were read several times in order to form a holistic picture of each interview;
- Notes were made on ideas, hunches and first impressions;
- The data were organised in computer files according to the interview questions;
- Text segments were coded using words or short phrases;
- Codes were then organised in emerging themes, and the transcribed interviews were colour coded according to the themes.

Data from the interviews are presented and interpreted in this chapter. This process will be guided by the themes and subthemes (categories) that emerged from the data during the thematic analysis, as well as the literature review in Chapter 2. I will start off with a profile of each participant school and the SA for the Foundation Phase. Thereafter the themes that emerged from the data will be presented. Quotes from the individual interview and the transcribed focus group interviews are used to support the presentation of the research findings.

4.2 THE SUBJECT ADVISOR OF THE FOUNDATION PHASE

4.2.1 Profile of the participant

The participant is a well-qualified educator with extensive experience in Inclusive Education, Early Intervention, School Readiness, Parental Support and Guidance, Autism, Asperger, ADHD, Dyslexia, Alternative and Adaptive methods of Assessment, Basic Counselling Skills and Brain Dominance. She has been working at the DoE offices in the Lejweleputswa Education District since 2007, first in the capacity of Learning Support Facilitator, and currently as the Subject Advisor (SA):ECD. As SA, she supports more than 20 different schools in the Matjabeng area. These schools reflect the realities of the South African education system and as such she is responsible for previously disadvantaged schools in township and rural areas, ex-model model C schools, as well as private schools in more affluent communities. Her duties are extensive and diverse which is evident from her engagement in teacher support activities (formal training as well as informal support to teachers) in the following areas:

- Identification of learning barriers
- Learning and teaching strategies
- Adaptive and alternative assessment methods
- Curricular development
- Multi-Level teaching

She furthermore attends all SBST (School-based Support Team) meetings on invitation. She receives the referrals of most urgent cases of learning barriers at these meetings after all

individual referrals have been screened and prioritised. She visits schools on site on set dates which are communicated to the SBST coordinator at least a month in advance. During these visits she prioritises the referrals according to urgency and writes reports after an investigation. Reports are written on individual referral documents and a condensed report is prepared for the SBST file. Reports are either handed to the SBST coordinator on the day of the visit or mailed. Reports are also often communicated via e-mail.

She outlined her main objective as empowering teachers to teach in such a way that they utilise multi-level teaching strategies to address the diverse needs of all their learners.

4.2.2 Themes and categories

Table 4.1 focuses on the main themes that emerged from the reading of the interview transcripts. Some categories or sub-categories have been omitted owing to the low frequency of responses. This is in keeping with the view held by Gay et al. (2011) who confirm that the task of interpreting data is to identify the *important* themes or meanings in data, and not necessarily in *every* theme.

Table 4.1: Main themes and categories that emerged from the interview with the SA

THEME 1	TEACHER KNOWLEDGE OF AND TRAINING IN ADHD
Category 1	Knowledge and training
Category 2	Teachers' ability to identify ADHD in the classroom
THEME 2	PREVALENCE OF ADHD
1	Prevalence of ADHD in Foundation Phase classrooms
THEME 3	THE IMPACT OF ADHD
THEME 4	SUPPORT SYSTEMS IN PLACE FOR TEACHERS AND LEARNERS
Category 1	Support from DoE
Category 2	Support from parents
THEME 5	MANAGEMENT STRATEGIES
Category 1	Management strategies at teacher level
Category 2	Management strategies at DoE level
Category 3	Management strategies at Institutional level
THEME 6	NEEDS

4.2.3 Findings from the interview with the Subject Advisor

From the interview with the SA, six main themes emerged with some consisting of various categories (see Table 4.1 above). These themes and categories are now discussed in more detail to present the major findings of the interviews.

4.2.3.1 Teachers' knowledge of and training in ADHD

a) Knowledge and training

The SA indicated that teachers in the Lejweleputswa District know and understand what ADHD is as she personally presented training on the topic.

"I trained them for 7 years in this district, black, white, everybody. This took us more than a year and a half. So if they now say that they don't know, then they just don't want to answer honestly. They were in groups."

She mentioned that the training of teachers was an initiative of the Director of Education, which was launched in 2010. It focused on curriculum differentiation, including amongst others, dyslexia and ADHD and ways in which it could be applied in the classroom.

"This almost took us a year and a half, but before that we had the opportunity occasionally to train the School-based support teams.....the School-based support teams were the first phase and then it was the principals and the SMTs [School Management Teams]. The big thing was to teach them how to improve their situation in the inclusive setting."

During these sessions the teachers or representatives of each school were presented with a manual called *Differentiating Teaching, Learning and Assessment*, a CD and a PowerPoint presentation. The responsibilities of the attendees were highlighted as follows:

"...and they were supposed to, with a CD that I gave them, the manuals, and the PowerPoint, cascade it down to all teachers."

Although thorough training was provided to all schools in the District, she considered the possibility that the knowledge was not applied at all schools:

"So the main thing I think that has happened, and one could probably not refer to all the schools, but the main thing is there were some schools who have definitely done it. Your main problem is that only your primary schools participate. Your former model C schools - definitely. They know. They cannot tell me they don't know. Because I had them all. I really did. I trained them well."

and

"I have been there for seven years, and in those seven years, about every other year there was a workshop that included learning disabilities. And ADHD was also included."

Despite the thorough training of teachers, she highlighted that time and teacher attitude may have an impact on teachers' management of ADHD learners in the classrooms. She felt strongly about the fact that teachers need additional support and may not always be able to succeed:

"They are, but they don't have the time. I don't think they can control it in the classroom on their own. But I think they know how to. Many of them know even if they say they didn't. But they do not always want to apply it in the classroom."

b) Teachers' ability to identify ADHD in the classroom

Identification of ADHD during the Foundation Phase of education is crucial. Brown (2007:24) argues that early identification of learners with ADHD implies appropriate interventions which can prevent a learner from becoming demoralised by repeated experiences of frustration and failure.

It seems that some teachers often perceive ADHD learners as being naughty.

“You know, I think many of them will think they are naughty, but they’re not naughty. And the other thing we must remember is that many of them can be somewhat Asperger, which they [the teachers] also don’t pick up.”

She mentioned that it may be difficult for teachers to identify ADHD in learners during their first few years in primary school, since in most cases Grade one and two learners still have to learn to function within certain disciplinary boundaries.

“I think they will find out from Grade 4 onwards. They all must still be taught to do things in a disciplined way because they are still used to walking around in class and play.”

Apparently language barriers, such as the lack of mother-tongue instruction, tend to complicate the process of identifying learners with learning disorders such as ADHD. The importance of teachers’ ability to recognise ADHD and other learning disorders “...so that they can inform the parents and advise them to seek professional help...” for their child, was emphasised. She recommended that teachers should use the DCM IV4 as a guideline to identify learners with ADHD (see 2.3).

On a question about the biological origin of ADHD, she had this to say:

“Oh you know, I think we make too much of it. You know, children got a hiding, and sat still. They were taught to sit still. And now we have to yell at them. It eventually becomes a habit to yell so that they listen....now really. To me it is as if it is a bit too fast.....Because see, you don’t really have a test for it. It simply goes on the DC4, you have to look there. That is but all. It is easy. There is no test. You cannot give him a physical test. They say there are a number of brain scans that can indicate things, but a brain scan is not done with all our children, so you cannot always say 100%, there is now really something that you could have prevented, that you can link biologically.”

On the question whether all Foundation Phase teachers have access to the DCM-IV, she replied:

“They should have!”

4.2.3.2 Prevalence of ADHD

Data from the interview strongly suggests that teachers are faced with the challenge of managing ADHD learners on a regular basis.

“There are already so many identified, the principals are now afraid it’s becoming a fashion. They would no longer point it out to you if a case is not severe, because there are too many. It is really true. There are so many that say they have ADHD that even I now begin to wonder.....”

Numerous ADHD referrals are made by schools to the District office every year. This takes place so frequently that the Child Guidance Clinic finds it very difficult to keep up with testing all the referrals.

“And this is the problem. The teacher has to recognise it so that they can go and tell the parents, “Look here, go and see...” It is often done like this. Much is really being done in the schools. The teachers do it so very often that the Child Guidance Clinic cannot keep up with testing those children. No really, there were many. There were stacks of references. The pressure is too much for them to be able to do it all. All that needs to happen when they send you a reference with a report – then again by the District Support Team....then they sit and decide whether this concession can be granted or not. At Grade 12-level – but before then it can be granted in the school situation.”

4.2.3.3 The impact of ADHD

As expected, it emerged from the interview that the disruptive behaviour of ADHD learners may affect the teachers in the classroom negatively since they may feel incapable of limiting their focus solely on the ADHD learner. In addition, typical ADHD behaviour may be prevalent in a considerable number of Foundation Phase learners who do not suffer from the disorder. Teachers are therefore confronted with disruptive behaviour from other learners as well:

“Yes man, it certainly will, because, I mean, she is also later going to start feeling, she cannot focus all her attention merely on him all the time – it can be. But now I must also tell you that this will not be the only child who will disrupt her. She will sit with those forty learners in front of her, of which at least ten will display this behaviour.”

Another concern raised was the fact that overcrowded classes and the heavy workload of teachers may also influence classroom management:

“It is overcrowded and I think they just don’t have the time nor are they in the mood to do it. Because the periods are short. You have to work through the curriculum.”

It is not surprising that the disruptive behaviour of ADHD learners also has a considerable effect on the teacher’s attitude towards them. An incident was highlighted to substantiate this:

“I am currently treating a child who was moved aside by the teacher. I walked into the classroom by chance and noticed that he was not sitting with the rest. He became angry and decided not to cooperate. I started working with that child and noticed all these beautiful characteristics and I started talking to his teachers about this and they then also started noticing it. This child now sits contently in class and he does his work, it is no longer a problem. It was almost as if they had lost him because they decided they are not going to work with this child.”

The negative attitude of teachers towards ADHD learners was confirmed by the following remark:

“I also went to see a teacher once, and she informed me that she is not going to stand behind him like a policeman, he must do his work.”.

4.2.3.4 Support Systems in place for teachers and learners

a) Support from DoE

Since the Department of Education regards ADHD as a learning barrier, support is provided to both schools and teachers.

“In the first place, generally speaking, we will not be able to focus on only one thing in the education system. Each school was supposed to, in general, have a Site-Based Support Team [SBST]. A Site-based Support Team usually consists of at least five members of the school, two or three of them from the Senior Management Team. In other words, they are supposed to have a bit more clout when they say something. But then they may invite experts for specific cases – this is the ideal. For example, if you sit with that ADHD child, and you have no idea what plan you can suggest for this child, then you can ask your medical doctor if he would come in for that specific case on that day. So you can approach experts from outside. It does not easily happen in practice, because the programmes are always very full. From there the young child is helped in the school, as the team then decided. We now have something called Screening Identification Assessment and Support, that is a file in the SIAS, a programme used by all the schools. Thus, in that program there is place for these kinds of all cases. The entire profile of each child is included and described in it. So, if you go to a next school, this whole profile can simply be transferred there.”

Once learners with barriers are identified in the lower Grades, certain academic concessions can be awarded which allow them special privileges, such as extra assessment time (see section 2.9.2.3). A learner may be eligible for an academic concession should his academic

progress be impeded by medical disability or other disorders. When a teacher suspects a learner to be suffering from ADHD, a referral is made to the Education Support Centre where the learner is evaluated to identify the severity of the problem. The National Education Policy Act of 1996, Annexure C1 (2014:15) stipulates that the following documents have to be included in the referral document for ADHD learners:

- Support Needs Assessment Forms
- Psycho-educational assessment
- Medical Report
- Supporting historical evidence
- Teacher comments
- School report
- School samples

The process was explained as follows:

“The only thing that should happen when a school sends you a reference with a report, is that the District Based Support Team then sits and decides whether this concession can be awarded or not. On Grade 12 level, but before this it can be awarded in the school situation. This is then the School-based Support Team who must decide“.

According to the National Education Policy Act of 1996, Annexure C1 (2014:3), identification of learners who are eligible for differentiated assessment and concessions should be done as early as possible in the Foundation Phase. Concessions are made to learners with learning barriers, including disorders such as ADHD, dyslexia, bad eyesight and other physical disabilities. The concessions which are related specifically to ADHD, were pointed out as:

“ ...more regular break times...”

“They can be moved aside to write tests and they can be allowed more time.”

b) From Parents

Although the participant mentioned the significance of parent involvement, she did not elaborate much. Only one point was stressed in the interview which is that parents should avoid allowing children to spend too much time watching television. The participant strongly recommended that parents should pay attention to their children's perceptual development:

You know, I wrote my thesis on the attitude of children – I don't remember very well, but it boils down to the fact that your good readers....what influences them to become good readers? I also think that our children who watch so much TVand then you never share your vision and your hearing, you do everything together. So, in other words, now he hears something here, perceptually he does not develop apart. He then develops his visual perception and his auditive perception together, it is never separated. I thus feel that if you can help that child from childhood to merely listen to stories – we all listened to stories over the radio, or we all read comics when we were small. And to me it feels as if those two perceptual landmarks... are never separated anymore."

4.2.3.5 Management strategies**a) Management strategies at classroom level**

Literature on ADHD provides numerous strategies which teachers can apply in the classroom to assist ADHD learners in focusing on their tasks and assignments, but the participant didn't provide much detail in this regard.

"They have to immediately refer him to the Education Support Centre, or to a doctor. The name of the Child Guidance Clinic is actually the Education Support Centre. So, they can refer him....."

Another strategy used to assist in maintaining concentration, was to allow learners to balance with the aid of a large ball.

“There are a lot of theories which state that if you allow the child to balance, and he has to then concentrate on keeping his balance, he will focus better on his work. For example those large balls, they say that if the child sits on it.....he has to concentrate on keeping his balance. Internationally specialists working with these children, have a flatter ball which has the same effect, but is not that obvious that the child is sitting on a ball.”

The importance of positioning the ADHD learner in the classroom was also highlighted. These learners should ideally be placed in the front area of the classroom, separated from other learners so that they cause the least possible distraction. (see section 2.6.2)

“The main thing is that you cannot consider that child in a group. He always more or less has to sit apart. You are aware of the fact that you must not place him at the back, you must place him in front, and you must place him at the side. This is the most important thing that you can do.”

It seems that these intervention strategies would benefit all learners in the Foundation Phase, not only ADHD learners. This was confirmed by the participant:

“You have certain things which you will do with all the children. You are going to do it with everybody. So at the end of the day you can handle even the naughty child like this. Like an attention deficit child.”

In summary, the SA indicated that there are other effective strategies to be applied in the classroom management of ADHD, but she was in favour of medical intervention as the most effective solution to the problem. She did, however, cautioned about the incorrect application of medication.

“I am worried that we do not have enough experts who diagnose it correctly or prescribe the correct medication. At the moment it is bothering me. Because it is a game. The child either sits here and it seems as if he’s lights-out, and he is a total zombie, or it looks as if it is not working at all, and the pill just has to be given again and again. The other day I tested a child here who I tested two years ago, with an IQwho had a huge difference between his two scores, with and without Ritalin. There I could now see that it actually worked. “

This view is in line with Wagner and Picton’s finding (2009) that medication increases the levels of dopamine or noradrenalin in certain areas of the brain. They mention two types of medications that are used in South Africa, namely stimulant medication (Ritalin or Concerta) or non-stimulant medication (Stratera). The stimulant type medication has a positive effect on all the DSM-IV symptoms of ADHD and has been administered to ADHD learners in South Africa for over 45 years. Medical intervention is discussed in more detail in section 2.6.1.

b) Management at DoE level

During the discussions it transpired that the Department of Education has strategies and regulations in place to accommodate learners with a variety of learning disorders.

“The department has certain concessions and they mention it very pertinently in all their documents that such a child must be allowed more breaks in between, or he will get extra time, or he will be moved aside to write a test.”

According to her, she tested and referred thirty children in the Lejweleputswa District during the previous year for concessions to be allocated. These concessions are usually allocated throughout all levels of education, from Grade 1 to 12. Once the learner has been tested by the District Support Based Team, referrals and a special application form are sent to the Provincial Department of Education. On Provincial level a team will then evaluate all the reports and documents upon which they will base a final decision. The following documents are typically included in the application file:

“ ...you can provide a medical certificate, your psychological psychometric reports, your occupational therapy, all those reports are included and attached to the application,.....”

These documents have to reach the Provincial DoE by August each year in order to make informed decisions in time for the following academic year. Concessions will not always be the same for each ADHD learner, as IQ levels and other underlying learning barriers accompanying the ADHD disorder can vary from learner to learner.

“An ADHD child who is very strong academically, but who does not finish tests within a certain time, they will give him extra time should they think it is necessary.”

According to the National Education Policy Act of 1996, Annexure C1 (2014), 20 minutes per hour may be granted for a learner with a learning disorder.

c)Management at Institutional level

Landsberg et al. (2005) argues that whether a school is a special school, a full-service school or a mainstream school, it should establish a School-based Support Team which is responsible for the provision of learning support in liaison with other teachers. This was confirmed by the participant. According to White Paper 6 (2001) the primary function of these teams is to establish properly coordinated learner and teacher support services by identifying and addressing learner, teacher and institutional needs. During the interview it was also emphasised that these teams can make use of specialist services and advice from, for example, medical doctors or occupational therapists to assist in developing a support plan for a particular learner, if needed. Once this plan has been established, the learner can be assisted and guided in the classroom in a structured manner. These support plans, called the *Screening Identification Assessment and Support (SIAS)* plans, are filed in the learner's profile.

“It has to be in everyone's file. At the Child Guidance Clinic [Education Support Centre] there is a file for each child. And for every child who has been diagnosed with

something, whether it is ADHD or dyslexia, or whatever..... it is actually supposed to be kept at the Child Guidance Clinic in each child's file. It happens. Sometimes you find many reference forms with these things attached to it, filed away for the sake of statistics only. Then we open a file and get a file number, and we leave it at that. Now, whatever is exactly in that file was in his etlab file, and it remains there in his profile. That profile goes from school to school. If I, for instance, go to a school for a Grade 10 learner, and I ask for that child's learner profile, let me have it, then I would generally find information dating back to his primary school, that still includes all those little things of mine. I can even see where I tested him, and that there was someone else who tested him. Then I receive it right away, and I can write my report. And in Grade 12, when you are supposed to have all these things in place, then all those other reports can indicate to you and provide guidance."

This file is usually transferred to another school should the child move to another district or simply move from primary to secondary level. Such a learner does not go through the entire process again, as the report and suggested plan will be available to the new school. It is evident that this process is crucial for the emotional and academic development of all learners with learning disorders.

4.2.3.6 Needs

When asked about her needs regarding effective management of ADHD in classrooms, she replied:

"I would like to have a special class in every single school. And in each school a remedial class. And these children who are in the special class..... those with an IQ of less than 80these are your Orion cases.... they will not get beyond Grade 10. And then your other special, I always say your Reading and Writing kids - you will not be able to re-learn them. Basically, you have to teach them where they have a problem, because you do not have so much time with them. You cannot cover an entire curriculum with them. But there simply are not enough financial and human resources to implement this measure."

4.2.3.7 Conclusion

From the interview responses of the SA, it became clear that with secondary training provided by principals, HOD's and School-based Support Teams, teachers in the Lejweleputswa District have been (or should have been) extensively equipped with the necessary knowledge to manage learning barriers in their classrooms. ADHD as a learning disorder was included in these workshops as part of an inclusive strategy. Since the participant personally made 30 referrals for concessions during a single year, it is evident that ADHD is a reality in the Foundation Phase within the Lejweleputswa District. Based on the interview data, I believe that learners with ADHD can be accommodated successfully in mainstream classroom.

At this stage of the data collection process I became eager to proceed with the focus group interviews at the participant schools to establish whether the teachers' opinions and experiences would either confirm or refute the findings of the interview with the SA.

4.3 THE FOUNDATION PHASE TEACHERS

In order to ensure that the principle of confidentiality was executed clinically, each of the schools was coded as follows: School A, School B, School C, School D and School E. The DoE representative was coded as SA. In each school the participating teachers reflected a distribution of varying teaching experience. Their responses were coded as School A (T1-T12), School B (T1-T6), School C (T1-T10), and so on. In total, forty three (43) teachers participated in the interviews. The system of coding ensured that there was no link between the data and the participants. This ensured the anonymity of the participants and the confidentiality of the data (McMillan & Schumacher 2010). Table 4.2 depicts the participant profile in more detail.

Table 4.2: Participant profile and coding

SCHOOL	TEACHER (T) INTERVIEW (FOCUS GROUP)	NUMBER OF PARTICIPANTS
<p>A</p> <ul style="list-style-type: none"> • Ex-model C • URBAN • 269 Foundation Phase learners • 7 classes • Multicultural (Eng/Afr) 	Teacher 1 – Teacher 12	12
<p>B</p> <ul style="list-style-type: none"> • Ex-model C • Urban • 151 Foundation Phase learners • 8 classes • 100% Afrikaans 	Teacher 1 –Teacher 6	6
<p>C</p> <ul style="list-style-type: none"> • Rural • 136 Foundation Phase learners • 7 classes • 100% African language 	Teacher 1 - Teacher 10	10
<p>D</p> <ul style="list-style-type: none"> • Private • 136 Foundation Phase learners • 7 classes • 100% English 	Teacher 1 - Teacher 7	7

<p>E</p> <ul style="list-style-type: none"> • Ex-model C • 275 Foundation Phase learners • 9 classes • 100% Afrikaans 	Teacher 1 – Teacher 8	8
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4.3.1 Themes and categories

The main themes identified in the focus group interviews were as follows:

- Teacher knowledge and training with regard to ADHD
- Prevalence of ADHD learners in the classroom
- Impact of ADHD in the classroom setting
- Support systems in place for learners with ADHD
- Management strategies followed in the classroom
- Teacher and learner needs with regard to the management of ADHD

Table 4.3: Main themes and categories (teachers)

THEME 1	TEACHER KNOWLEDGE AND TRAINING
Category 1	Knowledge <ul style="list-style-type: none"> • Understanding of ADHD • Identification • Academic achievement
Category 2	Training <ul style="list-style-type: none"> • Formal • Informal
THEME 2	PREVALENCE OF ADHD
Category 1	Prevalence of ADHD in Foundation Phase <ul style="list-style-type: none"> • In the classroom • Prevalence of ADHD related behaviours in general

THEME 3	IMPACT OF ADHD
Category 1	In the classroom <ul style="list-style-type: none"> • On other learners • Atmosphere • Medication
Category 2	On the teacher's <ul style="list-style-type: none"> • Emotions • Attitude towards ADHD learners

THEME 4	SUPPORT SYSTEMS IN PLACE FOR TEACHERS
Category 1	Support at Departmental level <ul style="list-style-type: none"> • Past situation • Present situation
Category 2	Support at Institutional level <ul style="list-style-type: none"> • Internal • External
Category 3	Support from parents <ul style="list-style-type: none"> • Cooperation with parents • Barriers to treatment

THEME 5	MANAGEMENT STRATEGIES
Category 1	Management strategies at teacher level <ul style="list-style-type: none"> • Strategies used in the classroom • Resources used
Category 2	Management strategies at Institutional level <ul style="list-style-type: none"> • Special needs education • Occupational therapist

THEME 6	TEACHER NEEDS
Category 1	Needs with regard to current situation <ul style="list-style-type: none"> • Smaller classes • Training

4.3.2 Findings from the interviews with teachers

4.3.2.1 Teacher knowledge and training

As discussed in Chapter 2, professional development of teachers at both the pre-service and in-service levels remains indispensable in order to create understanding of ADHD as a learning and behavioural barrier. Teachers' knowledge about ADHD and classroom management is crucial to the academic and emotional development of the ADHD learner.

Some of the academic challenges faced by ADHD learners are their difficulty to concentrate and the fact that they may not be managed correctly in the classroom (see section 2.7). During a review of the literature (section 2), it became clear that insufficient knowledge of ADHD can lead to teachers becoming negative and consequently disinterested in providing the needed support and help to these learners.

a) Teacher knowledge

There was a general understanding amongst all participants of the meaning of the term ADHD, except for teachers from School C (rural school) who did not respond when probed about this. Teacher 1 from School B summarised ADHD as follows:

“The ‘H’ is for Hyperactivity and without the H it is only ADD which is only related to Attention deficiency or Attention Deficit Disorder.”

Most of the teachers who participated in the study defined ADHD in terms of behaviour only, such as the inability to focus, hyperactivity and impulsivity. Only one respondent indicated that ADHD is related to hyperactivity only. According to an overwhelming majority of teachers an ADHD learner is understood to be a learner who cannot sit still, cannot focus, and has difficulty concentrating on the task at hand. Teacher 1 from School A described ADHD learners as lacking concentration attributed to hyperactivity:

“...his attention strays because he is hyperactive and he cannot sit still...”

Teacher 5 from School D recalled an incident which confirms the above-mentioned views.

“...he even battled to read when he should be reading, because he just couldn’t sit still or just concentrate on learning words.”

In addition, Teacher 4 from School D also confirmed the notion that these learners cannot pay attention. In line with this view, Teacher 1 from School E stated:

“They cannot concentrate for a long time, and are always busy with something else.”

In contrast, Teacher 1 from School D had the following opinion:

“He can sit still and react to a lesson the same way as a normal, non-ADHD child, but he has problems focusing and paying attention.”

Teacher 7 from School A pointed out that some ADHD learners are very strong academic achievers. Teacher 3 from School E also mentioned that she has an ADHD learner in her class who is extremely intelligent. According to Hartnett and Rinn (2004:75) most learners with ADHD are very intelligent or artistically gifted, however, they need the right guidance and support from teachers and parents. Contrary to this view, Teacher 1 from School E believed that ADHD is probably related to a lack of intelligence.

*“... but the intellectual intelligence is also not there. You struggle and you struggle and you are not going to achieve anythingeven with remedial, some will benefit, but some just don't have the intellectual ability. It is just accepted that way.
“*

I got the impression that this view might be a direct result of a lack of knowledge of ADHD. She further pointed out that it is difficult for her to recognise which type of ADHD a learner displays.

“I must be honest, I find it difficult to identify which type of ADHD a learner can be classified as. It is difficult, but we try.”

In line with the above, research findings indicate that the academic performance of learners with ADHD is often compromised because of their difficulties with sustaining attention (DuPaul & Stoner, 2003), thus not as a result of their intelligence.

Research findings indicate that exposure to learners with ADHD in the classroom is an important factor in teachers' knowledge about the disorder (Kos , 2004; Sciutto, Terjesen &

Bender, 2000). During the interviews it transpired that teachers are predominantly enabled by teaching experience to identify ADHD learners. Teacher 3 from School B explained:

“You pick it up with the listening tests, but you also find that you have just explained something and then this child would ask you what to do now.”

“O well you pick it up in the classroom, because they’re restless. A lot of them, when I’ve first started teaching I couldn’t understand why this child was rocking all the time, but not all of them do that.”

This statement from Teacher 1 from School D confirms that young teachers may not understand ADHD behaviour, but gradually with more teaching experience, it becomes easier to identify. Teachers who had prior experience with ADHD learners showed significantly higher total knowledge levels and ability to identify these learners than those without experience.

Teachers from School A agreed that ADHD in girls may be overlooked because without displaying hyperactive behaviour, they are still unable to concentrate. Teacher 4 from School B:

“They are not hyperactive as the little boys and it can then be missed easily.”

This view is in accordance with research by Kos (2004:30) who explains that girls tend to experience more difficulties with inattention than boys. These difficulties found in girls are far less observable than difficulties with overactivity, impulsivity, and possibly aggression. As discussed in section 2.5.1, the National Institute of Mental Health (NIMH) attributes this to the fact that the condition often presents itself differently in boys and girls. Teacher 8 from School A contended that parents are not cooperative in identifying ADHD.

“Especially in Grade one. The parents don’t want to hear it.”

One participant mentioned that this may be attributed to the fact that ADHD has a negative connotation attached to it. This view is in accordance with findings reported by Harisparsad (2010). Another concern was raised by Teacher 4 from School B:

“We have often wondered if the problem is not watching too much TV, which only stimulates visual development. The parents allow children to watch TV the entire afternoon just to get the child out of the way.”

This concern was also supported by the SA at her interview.

Teacher training

From the discussions it became evident that Foundation Phase Teachers did not receive adequate training on management of ADHD in the classroom. All participants indicated that the management of ADHD was not included in their formal training programmes. Teacher 3 from School B reported that she had a subject that *“...touched on it but we did not go specifically into it. We did not learn how to handle it, it was more like basic information only.”* Teacher 5 from School B, who is a student teacher, mentioned that a subject focussing on special needs education is included in her current training programme, *“...but they only refer to ADHD, they don’t tell you how to deal with it.”* The little knowledge that she gained about ADHD was through observation and learning from her mentor teacher in the classroom where she was assisting.

“I only learned about it this year, as we had a few kids with it [ADHD] in class. I learned from the teacher. And I now know more about it. I knew it was Attention Deficit and that you could see it, but never specifically knew how to deal with it.”

Both Teacher 1 and 4 from school B pointed out that training programmes for the older generation teachers did not cover ADHD at all.

“In our time, that is the older teachers, we did not know about ADHD.We only knew about hyperactive children.”

Teacher 8 from School E confirmed that the older generation was not even made aware of ADHD. She explained as follows:

“No, in those days we did not have these grand names. We only had good or naughty learners. No, that child used to be classified as being naughty.”

In line with this, teachers from Schools A and B who specialised in special needs education, also did not receive training on ADHD during their formal training:

“Yes, they did mention ADHD, but they never taught us how to handle it. You knew what ADHD was and what signs to look for, but the practical application was learned in practice.” (Teacher 1, School A)

This was supported by Teacher 3 from School B:

“The two of us specialised in RE [Remedial Education] so we are trained in that direction. But even then there was not much about ADHD. Not 35 years ago.”

When probed about informal training, various responses were received. All participants from School C (rural school) pointed out that they have never attended any workshops or informal training on ADHD or learning barriers. Teacher 1 from School A indicated that she attended a workshop in Pretoria, but never in the Lejweleputswa Education District. In addition, Teachers 1 and 4 indicated that they attended a workshop “...18 – 20 years ago”. Both Teachers 2 and 3 from School A mentioned that they have attended a presentation, rather than a workshop, where the school organised a specialist in the field to discuss ADHD with them. Apparently this was an initiative from the school, and not the DoE. This is in stark contrast to what the SA reported (4.3.2.1).

From data of the interview transcripts it emerged that teachers from School D (Private School) attended various workshops organised by the School.

"We have, you could attend courses."(Teacher 7)

"I went for a weekend with a colleague. I had a lot of children in my class that were battling and I was also battling. So I went." (Teacher3)

"There's been a couple of different workshops."(Teacher 1).

"Yes, there have been a lot of workshops." (Teacher 5).

Participants from all schools were in agreement that they never received training nor attended workshops on ADHD and other learning barriers which were arranged by the Department of Education. Teacher 7 from School E mentioned:

"The main thing with the Department is that they don't have competent people who can present training. You get absolutely nothing from any session."

Participants were all in agreement that they gained knowledge of ADHD via colleagues and informal research. They usually retrieve information on their own and provide each other with advice.

"You know, to me it feels as if many of us helped ourselves. Whatever we know, we simply had to work out by ourselves." (Teacher 11, School A).

This is again in stark contrast to what the SA claimed during her interview. (*"I trained them for 7 years in this district, black, white, everybody."*). She mentioned that all School-based support teams, Principals and SMT's were trained. It seems that this information obtained during these training sessions was not cascaded down to all teachers. (*"And they were supposed to, with a CD that I gave them, the manuals, and the PowerPoint presentation, cascade it down to all teachers"*).

Participants were all in agreement that they are not adequately equipped to manage ADHD learners in their classrooms. Teacher 4 from School D expressed her view as follows:

“But teachers can always benefit from workshops about ADD and autism or whatever, doesn’t matter how often, even if it is once a year. Yes, just to....so we can catch up. I don’t think a person can ever know enough.”

The findings from the above data suggest that there is a substantial lack of knowledge on the management of ADHD learners in mainstream classrooms in the Foundation Phase. A similar view was expressed by a study conducted in the Cape Metropole (Perold et al., 2010). During this investigation the researcher analysed the knowledge of ADHD of primary school teachers in the peripheral areas of the Cape Town Metropole in the Western Cape. The results suggested that there is a significant lack of knowledge among teachers in certain key areas of ADHD. This lack of knowledge is a matter of concern since teachers play a pivotal role in the recognition, referral and treatment of ADHD.

4.3.2.2 Prevalence of ADHD

a) In the classroom

Knowledge of ADHD will help a teacher to see it in perspective as part of a learning barrier or developmental disorder that can be managed. ADHD appears to be one of the most common childhood learning barriers (see 2.5). It affects millions of learners worldwide, but the proportion of individuals with ADHD is not conclusive at this stage. According to Harisarsad (2010) ADHD affects 3-5 % of diagnosed children in South Africa, which is approximately 1 child in every classroom.

These findings were supported by teachers from School A, B and D who confirmed that all of them have at least one ADHD learner in their classrooms. Teacher 5 from School B explained:

“Yes, I’ve had a few every year. And these are children that I refer to a professor in Bloemfontein who evaluates and diagnose them. I experience this more often than what I expected.”

Teacher 1 from School D:

“Every single one here has someone with ADHD”

From the discussions it became evident that teachers are confronted with learners whom they suspect of having ADHD, but which have not necessarily been tested. Teacher 6 from School E expressed the following view:

“You know, as you are talking and explaining.....(pause).... every year you have such a child. But they have not been tested for ADHD.”

Data from the interviews suggest that teachers with more teaching experience identify learners with ADHD more readily. Several comments indicated so:

“I think that the older hands see it easier” and “...the ones that have been in education longer sees it more often.” (Teacher 1 School B).

Recent studies indicate that the prevalence rates of ADHD have increased significantly over the past years (Glass & Wegar, 2000; Kern, 2008). This was confirmed by participants from Schools A, B and D. Teacher 1 from School B made 13 ADHD referrals the previous year. Teacher 7 from School D supported these views as follows:

“Yes, it’s become worse, definitely over the years.”

Teacher 1 from School B explained:

“Yes, the incidence of ADHD learners does increase. I had a terrible class last year and I made thirteen referrals. Now you can imagine that situation for yourself...(laughter). And remember that I don’t do unnecessary referrals.”

“ And it feels like it is becoming worse every year.” (Teacher 10, School A.)

Teacher 2 from School D mentioned that she currently has two learners in her class who take medication for ADHD. To add, Teacher 2 from School E mentioned that she had “5 cases this year.”

In contrast with the above views, Teacher 6 from School E responded:

“It is the first time in 38 years that I have a serious case of ADHD.”

Once again, teachers from School C (rural) did not respond to this question. Since they didn’t show any knowledge or understanding of ADHD, the behavioural disorders related to ADHD were discussed and explained first. Even after these explanations, they still failed to respond to many of the questions.

b) Prevalence of behavioural disorders associated with ADHD.

Based on my research of the literature, I believe there may be several ADHD learners in classrooms that have not been identified. In keeping with the Brown model of ADHD (as discussed in section 2.10.3) everyone has occasional impairments in their executive functions, but because learners with ADHD experience much more difficulty in their development and use of these functions, the occurrence of the following behavioural disorders were discussed with the participants. Table 4.4 provides a summary of ADHD related behaviours as seen through the eyes of the participants.

Table 4.4: Prevalence of ADHD: typical responses

Behaviour	School A	School B	School C	School D	School E
The ADHD learner fails to pay close attention to details	50/50	All in agreement	No response	All in agreement	50/50
The ADHD learner has difficulty finishing tasks	All in agreement	All in agreement	50/50	All in agreement	All in agreement
The ADHD learner finds it difficult to organise tasks	All in agreement	All in agreement	All in agreement	All in agreement	All in agreement
The ADHD learner has difficulty to focus his/her attention on tasks	All in agreement	All in agreement	All in agreement	All in agreement	50/50
The ADHD learner gets distracted easily.	All in agreement	All in agreement	All in agreement	All in agreement	All in agreement
The ADHD learner fidgets with feet and hands	All in agreement	50/50	All in agreement	All in agreement	All in agreement
The ADHD learner is emotionally sensitive	50/50	All disagree	50/50	All in agreement	All in agreement
The ADHD learner does not follow instructions immediately	All in agreement	All in agreement	All in agreement	All in agreement	All in agreement
The ADHD learner has difficulty remaining seated	All in agreement	50/50	All in agreement	All in agreement	All in agreement
The ADHD learner talks continually and often interrupts the teacher	All in agreement	All in agreement	All in agreement	All in agreement	50/50
The ADHD learner blurts out answers before the teacher has finished the question	All in agreement	All in agreement	All in agreement	All in agreement	All in agreement
The ADHD learner does not like homework or schoolwork that requires sustained mental effort	All in agreement	50/50	No response	50/50	All in agreement
The ADHD learner loses crucial things such as pencils and books which he / she would need for activities	All in agreement	All in agreement	No response	All in agreement	All in agreement

A few noteworthy comments were as follows:

"I had an incident the other day. We had to complete a simple test for Life Orientation, one of those where you have a statement and you simply circle YES or NO. I read the instructions and showed them on the test paper that there is a Yes and a No that has to be circled. I explained that should they agree with the sentence, they should circle the Yes and if they do not agree, they should circle the NO. That

evening when I marked those tests, this one girl wrote Yes or No next to each statement. And I specifically stood next to her table while I explained the instructions.”(Teacher 9, School A)

In contrast, Teacher 1 from School B was of the opinion that this type of behaviour cannot always be linked to ADHD as there can be other contributing factors. She explained:

“Yes a lot, but I have to say we cannot identify all learners displaying this type of behaviour as suffering from ADHD because you get behavioural problems such as discipline from home. So there are many other factors to take into consideration.”

4.3.2.3 Impact of ADHD

Avramidis and Norwich (2002) explain that teachers are key to the successful implementation of inclusive policies and add that their perceptions of them will not only determine their acceptance of it, but it will also affect their commitment to implementing such policies. This view is supported by both Cook (2001) and Reynolds (2001:476) who state that teachers’ attitudes towards learners with special needs appear to influence the type and quality of teacher-learner interactions, thereby directly impacting on the learners’ educational experiences and opportunities.

c) Impact of ADHD in the classroom (on other learners)

The classroom environment may represent one of the most challenging and frustrating places for ADHD learners, most probably because this setting requires learners to engage in behaviours that are in conflict with the core symptoms of the disorder. The ADHD learner can affect the learning environment in a classroom by causing frequent distractions and displaying disruptive behaviour which have an impact on both teachers and other learners (Colberg, 2010). The data from the interviews suggest that the impact of ADHD learners on the classroom setting and their peers could vary according to the type of ADHD symptoms the learners display.

During the interviews, participants were asked to explain how ADHD related disruptive behaviours affect the rest of the class. The majority of responses received acknowledged that the ADHD learner's behaviour can often disrupt the class as a whole, but particularly those learners sitting close to them. Teacher 1 from School A recalled an incident where the ADHD learner's behaviour had a ripple effect and most of the other learners also started misbehaving.

"It sometimes feels as if you want to scream, but you know it won't help.....especially if his behaviour has a ripple effect. The days when he is out of control, then it is as if the rest of the children who is sometimes a bit naughty is then out of control with him. And this makes it difficult. Those days it feels as if your class is out of control and you just can't get that calm atmosphere in your class."

This view was supported by Teacher 5 from School B:

"Because it is true, they say that in the church too, one person can disrupt the entire hall. If someone enters late, the entire congregation will stare at him until he sits down. So, if there is but one child, he distracts the whole class....with anything, by yelling, standing up, everything. It is highly frustrating for the educator."

Another problem expressed by participants appeared to be the ability of the child with ADHD to distract others from doing their work. The majority of teachers from School D stated that ADHD learners can be distracting and disruptive. In line with these views one teacher from School B stated that fellow learners *"...cannot concentrate as they are looking at what the ADHD learner is doing."*

This view was supported by a teacher from School B:

"Some of the children will tell these children to please keep quite because they are talking all the time."

According to a teacher from School A, ADHD learners do not cope well when working in groups. This is supported by McClintock (2002) who found that the impact of ADHD learners in the classroom extended to other learners, not only by denying them some teaching time, but also by distracting them from their work.

Several other participants commented that the classroom atmosphere could become tense and unsettled. A teacher from school A mentioned that the behaviour of an ADHD learner in the classroom can cause conflict amongst learners. This view was supported by Teacher 1 from School B who described a learner with aggressive behaviour:

“I have an aggressive one now, he grabs the other child by the chest or physically hits him, you know, it’s quite difficult.”

A similar incident was described by a teacher from School E:

“I cannot allow her to be alone with the other children. For example, yesterday she tore up everything she could get her hands on. Today she assaulted another learner during break. Tomorrow she might scribble on the doors again and it does not help to send her to the principal. All you have to do is to politely say, do not do that again, then you get the correct reaction from her. But the moment that you start yelling at her, then it is now! Then it is as if she attacks you too. She has already attacked a teacher in a lower Grade at another school. And I am not in the mood for that now.”

It became evident that the behaviour of the ADHD learner is likely to be perceived by peers as negative. A teacher from School D made the following statement:

“And other children tend to start disliking them because they are so irritating.”

Others added:

“Some of the children will tell their friends to please keep quiet because they keep on talking while they are trying to work.” (Teacher 5, School B)

“Here with us, those kids are not popular. The other children in the class don’t like them. It is extremely difficult for them, they suffer.” (Teacher 8, School A).

One of the respondents from School A pointed out that the stronger academic learners display negative behaviour towards ADHD learners as *“...they feel that they are wasting time. Those [ADHD] learners are getting the teachers’ time and attention and not them.”*

Several of the participants indicated that the ADHD learner takes up a large proportion of the teacher’s time. A teacher from School D confirmed this by remarking:

“I think it also draws a lot of teacher time, doesn’t it? You are busy focusing on that one trying to get them to sit down and focus and be prepared.”

The treatment of ADHD with medication was also regarded as having an impact on the ADHD learner’s ability to function in the normal classroom setting. One of the teachers from School A highlighted that teachers can easily detect whether the learner has taken his medication each day.

“I have had cases where Ritalin performs miracles. If those kids arrive at your class you can see whether they have taken their medication or not.”

In addition, a teacher from School B specifically mentioned:

“I have a little boy in Grade 2. If he takes his medication, you can work with him and as soon as he doesn’t take it you can’t. You immediately notice it. Then I keep on wondering what is going on with this child? If I then ask the mother, she will tell me that she doesn’t have money for the medication.”

The impact of medication was further highlighted by Teacher 2 from School E who explained that she currently has a child in her classroom which showed a significant improvement in his schoolwork after he had been diagnosed with ADHD and started taking medication:

“There is a little boy sitting in front in my class. He does not bother his friends. He is not like those kids who drive you crazy; he himself is busy. He is busy on his own. He will be busy and when you are working then you have to go and stand close to him. When you touch him, then he..... and keeps busy with his work. A little while ago he took his own work out again and did not focus on class work. Then I spoke to his mother. And you won’t believe it, that child is taking new and stronger medicine. His work is done neatly. I am talking about that blonde little boy; about the neatness of his work. He gets 25 out of 25 for his spelling. You should see the neatness of his work. You cannot believe how his work has improved. He made a round-about turn, all because of the medicine.”

This view was substantiated by a teacher from School D who recalled the following incident:

“I’ve got a little girl in my class that’s been on medication, I think since the beginning of this term, little Sue and the one Friday she came to school and she was just sitting, like she used to and then she’s up, then it’s her hair, then it’s her pencils and everything, but she is not concentrating and then I said to her, “Did you take your tablet this morning?”. No. “

Some teachers, for example Teacher 2 from School A, prefer to keep the medication in class to ensure that the learner takes it every day. One teacher from School E concurred with this standpoint by mentioning the following:

“I tell them to bring the tablets to me, I will give it to them. Because parents say that they give the medication, but they don’t.”

d) Attitude and emotional condition of teachers

Teachers' attitudes and knowledge towards children with ADHD may be expected to influence their resultant behaviour (Glass & Weigar, 2000). According to Kos et al. (2006) teachers tend to perceive learners with ADHD as requiring extra teaching time and effort. The data from the interviews suggest that this perception reflects the reality. The majority of teachers experience the teaching of ADHD learners as difficult and requiring a lot of patience. A teacher from School A explained:

"It is difficult with those children. I can almost say that nothing works, things may work but only for a short while."

She also recalled the following incident:

"...we had a concert and it was just terrible in my class. That child was running on top of the tables, under the tables, jumping over everything, and I had to remain patient."

When probed about how teachers cope with ADHD learners in their classroom, participants from School A responded as follows:

"With effort." (Teacher 1)

(laughter)

"It is difficult. Because with that child you need a specific curriculum, and patience. And there isn't any. And you don't always have the time for it. At that stage you are really stressed out, if the parents do not want to listen to you and they do not want to cooperate. You do all the recommendations to them, which you have to do. That child is in your class and you must get results." (Teacher 3).

Given the nature and frequency of the negative behaviours exhibited by learners with ADHD, it is not surprising that teachers often feel pessimistic about teaching children with the condition. One teacher from School A explained her emotions as follows:

“It drains you. It is very emotional on you, really. At some stage you feel like screaming, but you also realise that the child has no control over certain behaviours. It is especially bad if it has a ripple effect on the rest of the class. Some days it’s better, but other days it is really draining, then it’s bad”.

In addition, numerous participants felt that dealing with ADHD learners on a daily basis is emotionally draining and teachers become tired. A teacher from School D explained it as follows:

“Because it really drains you. It feels like you start all over again the next day.”

“You are only human, you know. You get tired and sometimes you’ve just had enough. It’s unfortunate.” (Teacher 5, School A).

A contributing factor seems to be whether the learner takes medication or not.

“If they are not on medication, you have to cope with that child every day. It drains you emotionally, physically, completely.” [A teacher from School D].

In contrast to the above views, another participant from School D made the following statement:

“It doesn’t challenge me at all. I’ve got children that are on Ritalin and I’ve got children that aren’t. And I feel if you’ve got a child that got ADHD and you keep him occupied, it’s just a lot of patience and love I think.”

This was supported by Teacher 1 from School B who explained that they get discouraged and admitted that teachers get impatient, but they try to remember that the ADHD learner cannot always control his behaviour.

“Yes, of course. And also because he disrupts your class so....it is bad for you, because the other children actually suffer because of the behaviour of one or two children. But one is an adult, and yes, you do lose it. You sometimes yell at that child. But most of the time you try to think that the child cannot help the way he is. You know, I put on red lipstick when I am really desperate, or when I feel I am going to strip. Then I go to my car, and take my lipstick from my handbag. So the children already know, when Mrs {.....}. colours her lips red, they had better look out. Yes sure, it makes one desperate.”

In addition, a participant from School D expressed empathy with ADHD learners and their difficulties in the classroom:

“Ag. I find it so sad, I don’t sleep at night, because I worry, I always think of how I can help them and what I can do, you know.”

“You want to show him how fed-up you are with him, and how bad it is for you because he disrupts your class. But he still has to leave with a good word from you.”
(Teacher 2, School A)

It follows that teachers with more teaching experience and knowledge of ADHD have more understanding and compassion for ADHD learners. Furthermore, teachers seem to be under a lot of pressure to finish the curriculum in time. One of the teachers from School E expressed concern about the pressure placed on teachers. Several participants spoke out strongly about ADHD learners preventing them from getting through their workload. A teacher from School B stated:

“I do not go back to the one child to get up to date with the work because there is no time. You cannot do everything the Department wants you to do.”

In turn, a teacher from School A mentioned that they all have teacher assistants in their classes, which was very helpful.

It is evident that while teachers are concerned about the social and academic difficulties experienced by learners with ADHD, they tend to be very concerned about the emotional impact on them and the pressure to work through the syllabus.

4.3.2.4 Support systems in place

a) Support at DoE level

During the interview with School A it became evident that they are very positive about support from the SA . Teacher 3 said:

“The SA we now have is very clued up with ADHD as she used to be the LF at supporting education of the Foundation Phase.”

Teacher 2 elaborated on this saying that she (SA) is very capable and *“...we make use of her on a regular basis.”* Teacher 5 from School B recalled an incident where the DoE was extremely helpful with a learner diagnosed with Asperger syndrome:

“You know, I had a specific child that I have sent [for intervention] about three years ago. I think the kid is now in Grade 5. They then diagnosed him with Asperger Syndrome. He is not in our school anymore, but what impressed me at that stage was that they gave the child the most wonderful reading material and for the class teacher a booklet as well and one for them at home. This child is a merit learner, he gets merits all the way up.”

All the other participants agreed that similar support strategies are needed for ADHD. However, most of the participants from the other schools voiced their disapproval of the poor support for ADHD from the DoE for both ADHD learners and teachers. Teacher 2 from School A mentioned that in the previous dispensation, ADHD learners could visit the Departmental Education Support Centre after school and receive therapy and assistance. She mentioned that *“...there were different types of therapists.”* In addition, it was

mentioned that learners who could not afford treatment could be assisted by the Department:

“I know the other thing previously we could report the children who didn’t have the finances to the school guidance clinic. Then they could receive their medication from the state hospitals, but it is now practically impossible. It takes such a long time before they eventually receive a number or a clinic card or whatever..... that here, at the end of the year. If only there somewhere was a system, or something, how one can support those who really do not have the money, because many of these children come from difficult home circumstances, really.” (Teacher 1, School A)

This may be due to the fact that this centre no longer has the much needed human resources, as indicated by the SA in her interview. This view was supported by Teacher 3 from School A:

“The centre is not taken away, it is simply now too small to serve the whole districtThey cannot handle the masses of children.”

It was mentioned that ADHD learners have the option of going to the Regional hospital (Bongani) where several therapists are at the disposal of these learners. It is, however, a lengthy process as a teacher from School A pointed out:

“But like, for example, you can....at Bongani hospital there is an occupational therapist programme. But, as (name) says, by the time you can come in there..... it takes so long. With the card, and things. But they are cute young girls there. I once had one who helped. They are students doing their practical year. They are there at Bongani. Many of them are white girls. But there are also black girls whom they are training. And they are very cute and very keen, I’d like to say.....”

b) Support at Institutional level

From the interview transcripts it emerged that even though schools have School-Based Support Teams in place for the management of learners with learning barriers and developmental disorders, these committees are not functioning effectively. In some schools learning barriers are only attended to when a learner is at risk of failing academically, but in cases where the barrier doesn't pose an academic threat, it is not treated at all. Teacher 2 from School E affirmed these views:

“But it is only if he is facing an academic risk in an area that he is sent for remedial education. If I think of (name)..... he is not being sent for remedial.”

Concern was expressed by Teachers 1 and 4 from School B about the lack of support:

“That is what's happening with us as well. We talk to each other in meetings and try to give advice. At least we try to assist each other where we can.”

Teachers from School C did not respond to the question. The majority of participants felt that at the end of the day the ADHD learners are their responsibility and they have to accommodate them:

“You do all the recommendations to them, which you have to do. That child is in your class and you must get results.” (Teacher 3, School A).

The schools also seem to provide minimal support and in some cases no support at all was provided to teachers. This view was substantiated by Teacher 3 from School E:

“Often we would be informed by the principal that there are workshops or training available, but it is never mentioned that the school will pay. It is always for your own account. So, they may provide the opportunity, but to actually attend is not affordable to teachers.”

Although participants from the majority of schools were negative regarding the support from the school, participants from the private institution seemed to be more positive. According to these teachers the support class is functioning effectively. Teacher 3 explained that the school appointed a part time occupational therapist who works at the institution twice a week. In addition, she also highlighted that teachers at this school support each other:

“I think we support each other a lot. I mean, when I think about the other teachers, I often go to (name)..... for help.”

Due to this support structure being in place, participants felt that ADHD learners are identified effectively at an early stage. This makes it easier for both the learner and teachers in the process of progressing to higher Grades. Also, smaller classes at the private school make identification of ADHD learners easier. The following view was expressed by Teacher 4 from this school:

“You see, luckily for us as the Grade 3 teachers, the lower Grade teachers will discuss it with us and say, look, you know this is the situation. So by the time they get to Grade 3 they’ve been identified basically.”

“And it is easier for us because our classes are smaller.” (Teacher 1, School D).

Although support seems to be minimal at most of the institutions, some of the participating schools make provision for occupational therapists which can be considered as additional support. This is discussed in more detail in Section 4.3.2.5.

c) Support from Parents

One key to successful management of ADHD is a good working relationship between parents and teachers. According to Hartnett and Rinn (2004), ADHD learners need the right guidance and support from both teachers and parents. Parents have to be involved in drawing up an action plan to help the ADHD learner. Teacher 1 from School A contended

that it is important for teachers to have a very close relationship with the parent as they have to receive regular feedback from parents regarding evaluations and progress at home. A similar view was expressed by Teacher 2 from School E.

“You and the parents must have a very close working relationship. You must continually control whether the child is taken for regular tests and visits to the doctor. Because as the child puts on weight, the medication needs to be adapted and things like that. Also to tell you whether he is taking his medication because this is important when the child needs to write tests.”

Several participants felt that where there was strong liaison between the school and parents, learners coped very well in mainstream classrooms. Teacher 1 from School A expressed the following:

“Parents who really put in effort to support and help their children, these kids excel.”

In contrast to the above, the majority of participants felt that some parents do not cooperate with the teachers at all. In some cases parents attributed the ADHD behaviours of the learner to boredom. Teacher 2 from School B argued that some parents are aware that the learner has been diagnosed with ADHD, but they simply do not inform the teachers.

“Some parents are aware of it but do not want to tell you. They don’t want to acknowledge that the child has ADHD.”

According to Teacher 4 from School B she had an incident where she pointed out to the parents that the learner was displaying ADHD behaviour and she recommended that the learner be tested, upon which the mother said that the learner had already been diagnosed with ADHD a while ago but *“...I was waiting to see how long it is going to take you [the teacher] to notice it.”*

A teacher from School A recalled the following incident:

“At the beginning of the second term we got a new child. He definitely suffers from ADHD. The principal and I spoke to his parents, especially when we received his profile from ...uhm..... Pretoria. We suggested that he be taken for evaluation, and they refused. At this stage they still refuse. They feel they want to try something themselves. It is, however, such a major disruption in my class, terribly so. Thus, the matter will have to be attended to again, and will have to be discussed with the parents.”

Concerns were raised by teachers from various schools that parents turn to medication as soon as the learner is diagnosed with ADHD. Teacher 3 from School B strongly disagrees with parents who regard medication as the only solution and a quick fix, thereby ignoring behavioural therapy.

“I also think that most of the parents immediately just want the kids to get medication. As soon as they hear anything about ADHD they immediately feel they must get medication..... Almost as if they give them the tablets to make it better, but I think that they don’t do anything beyond that to help. They just expect that the medication will solve the problem instantly.”

In turn, Teacher 2 from School B indicated that there are also parents who oppose the use of medication. This could be attributed to the fact that ADHD medication such as Ritalin is often prescribed by GPs without allowing the learner to go through the required evaluations and tests. This teacher said: *“This meant that the parents do not like Ritalin because the dosage was not prescribed correctly. Now the parents seem to be scared to use Ritalin.”* This view was supported by Teacher 2 from School D as follows:

“A lot of them are very anxious about the medication.”

There were also participants who felt that in some cases, medication can be very effective.

“They will only put the child on medication if you’re very lucky, and when they can actually see that by for instance June there is no improvement in the child’s mark and

that he is really struggling and falling behind. Then they will take the child to a doctor and get medication, but it is hard to get them there.” (Teacher 4, School D).

During the interviews several teachers identified financial constraints as a barrier to medical treatment for ADHD. Teacher 4 from School B noted that in some cases the medical aid funds become exhausted and the parents consequently stop giving medication to the learner because they can't afford the prescribed medication. These views were supported by recent studies indicating that there is increasing recognition of the financial and emotional impact of ADHD on the family (Sayal, Taylor, Beecham & Byrne, 2002), which has obvious consequences for the provision of educational and financial resources such as behavioural therapy and medication. Attempting to balance the demands of a child with ADHD and the demands of their own work also places a lot of pressure on parents. The data from the interview transcripts confirmed that the participants experience different levels of support from parents, irrespective of the status (private or public) of the school.

4.3.2.5 Management strategies

a) Management strategies of Teachers

According to the overwhelming majority of participants, the most important strategy used by teachers to manage ADHD learners is to seek advice from one another. Teacher 7 from School D contended that ADHD learners are discussed with new teachers:

“You see luckily for us as Grade 3 teachers, the lower Grade teachers will discuss it with us and say look you know this is the situation with (name), so there is a lot of information from the previous teacher as well.”

The same strategy is followed at School E where Grade 1 teachers prefer to discuss the new learners with the preschool teachers.

“What I like when I receive a class list, let's say I receive next year's class list at the end of November, then I like going to the preschool and ask (name)..... to quickly

check with me if there are kids to whom I have to give special attention, or if there is something they can tell me. Then they will tell me, look, that little one is so, and that little one is so. Not in a bad way, especially if it is one with ADHD, if they suspect it, or possibly has learning problems, or is restless - the little one who is with you now this year. You know, the preschool has already told me a specific little one cannot sit still, so you may try this or that, and I have found that if you know you are prepared. Then you can plan for it, and so on. We then carry the knowledge over to the next Grade. But not with the aim of being nasty. We once had a meeting and I indicated that we are not here to slander the child, but to help the child, so if I mention something about that little blonde who is with her this year.... Last year when he was with me I experienced problems, but only if he sat next to a specific child. But, as I say, he is busy, yes, but then there is another one busy next to him, so then the problem becomes worse. We like to talk to one another."

Another strategy applied by teachers is referrals to occupational therapists. Echoing this view, Teacher 3 from School D indicated that once a learner has been identified, he is referred to occupational therapists. A teacher from School E confirmed that this strategy was also followed at their institution. Unfortunately, as indicated earlier, due to financial constraints not all learners are afforded the opportunity to get professional help.

From a practical perspective, the majority of teachers from all schools agreed that seating arrangement is a commonly used strategy which is also quite effective. The views from the participants indicated that some teachers prefer to place ADHD learners in the front of the class, not sharing a desk with another learner, while others believed it best to place the learner at the back of the classroom (see section 2.6.2.). One teacher mentioned that she preferred to place them alone at a table:

"That thing usually is best. They have to sit alone at a desk. Uhm ...preferably in front, because if they sit at the back you tend to lose them. They must sit as close to your desk as possible and alone, there mustn't be anything near them that can distract them." (Teacher 1, School D)

Teacher 1 from School A related that she experimented with seating the learner both in front and at the back of the classroom:

“What also helps us now is that we have in our classes.... uhm.... assistants. So it is us, and we have an assistant. So we try and move that child away from other friends. And you also try.... let’s say, some are in front at your table, and the others are at the back at the assistant’s table. And then at least you try....uhm.... where you can place your finger on him without disrupting the whole class – and where the assistant at the back can help. Because they constantly yell out and cannot concentrate, they then yell out, I don’t know, what now, help me.....or that sort of thing. Let’s try to curb it, but the thing is, it is not really just one or two, there are many in all our classes, we actually have many in our classes. But – uhm – it remains a challenge, and then it is merely regular interviews that...”

A similar strategy was followed by a teacher from School B:

“Placing the child in front, works better for me sometimes than in the back, I try to do both.”

Some teachers favoured a positive behavioural strategy. Singh (2012) believes that teachers will increase the possibility of positive behaviour in the classroom if the learner’s positive or desired actions are praised. A teacher from School B believed that an aggressive learner can become more docile when receiving repetitive positive feedback:

“I have an aggressive one now. He grabs the child in front of him at the chest or physically hits him, you know, it’s quite difficult. But he is calmer now at least. I think he sees now that we praise him for what he does right and gives stars for the child so that he can be less self-conscious. His handwriting for instance is bad but the day that just one letter looks nice, then we compliment him on this. But it remains a challenge.”

Some teachers indicated the advantages of using a 'time out' strategy. It was explained as a period of time allowing the learner to cool off and the teacher to take a break. Time-out is considered a cognitive-behavioural intervention where the learner is removed from the current situation (Singh, 2012). One respondent explained that as soon as she notices the learner getting restless, she tries to find a time-out opportunity such as sending him to make a photo copy or asking another teacher for a pen.

According to the occupational therapy delineation model different sensory modulation techniques could be scheduled into the ADHD child's sensory environment (Chu & Reynolds, 2007). These include giving the learner deep pressure touch, using latex-free rubber tubing as a 'chewy', using a weighted vest and allowing the child to sit on a therapy ball chair while doing his schoolwork (see section 4.2.4.5). In keeping with this theory, Teacher 1 from School D indicated that she makes use of certain items to regulate the learner's behaviour.

"A simple little thing. I have some squeeze balls and things like that I give them to play with. They can still concentrate if their hands are busy, that tends to help."

"They once, for example, suggested that one should make him a balloon filled with flour. He has to hold it all the time. And let those children chew gum. Then he won't be doing such strange things, but they cannot, however, sit still." (Teacher 2, School E)

When probed about the option of applying ADHD classroom management strategies to the whole class and not only to the individual ADHD learner, different opinions were raised. Many participants felt that they are simply too busy and don't have time to apply extra strategies. Only one teacher from School B responded positively and believed that such a strategy can be effective as all Foundation Phase learners excel within a structured and consistent environment.

Concerns were raised by Teacher 2 from School A regarding the difficulty of managing ADHD learners effectively in mainstream classrooms as the prevalence of ADHD continues to increase.

“You can try to limit the disruptive behaviour, but the thing is there is not only one in your class, we really sometimes have several.”

From the participants’ responses reported above, it is evident that ADHD learners can be managed effectively in mainstream schools if the teacher has the required knowledge and understanding of typical behavioural patterns of the disorder. However, even if teachers have empathy, understanding and knowledge but they do not receive support in the management of these learners, the most positive amongst them may become discouraged.

“You really try, and sometimes you try....I... uhm.... to punish, and at other times I am positive. It is difficult for me with those children I actually want to say, hardly anything works. It may work for a little while, but it isn’tdear me, it is difficult to get them so far as to behave properly, it is incredibly difficult.” (Teacher 2, School A).

b) Management strategies at Institutional level

The function of support classes [special needs education] which is to address and alleviate learning barriers, was explained by Teacher 1 from School B:

“This is for a child that has learning problems, one with an average to higher than average IQ. In other words you actually just want to make sure to remove the blockage so that he can make the Grade in the future. That is what it is about, it is not to help the ones that battle.”

She continued to explain that there is a special class at her school where learners with a lower IQ are accommodated.

“(Name)..... is our special class teacher, I am speaking about a limited IQ, those are the ones going to her class for special education, where she teaches easier and more manageable work, but still high enough to carry the learner for the rest of his or her life.”

In contrast with the above, some participants indicated that support classes are only used for learners who are at risk of failing academically. This was confirmed by Teacher 1 from School D who explained that it is the case at their school.

It follows that support classes are aimed at addressing learners with learning barriers who may be at risk or may have a lower academic ability due to a learning barrier. Special classes are for learners who are challenged intellectually due to a lower IQ. School A and school D have a fully functioning Support Teaching class. According to the teachers from these schools, the support teacher is very helpful and often refers learners for professional help.

In contrast to this view, Teacher 1 from School B stated that there is a support teacher present at their school, but that support teaching is not fulfilling its role as it used to:

“There is a RE [remedial education] teacher at our school but it is no longer one on one. You now have one to four. Thus the function of the RE [remedial education] is no longer what it was, or what it is supposed to be.”

Participants from School A indicated that the School makes provision for an occupational therapist twice a week. The Foundation Phase ADHD learners then receive sessions with the therapist during school hours. The learners with ADHD related problems are all referred to the therapist, irrespective of their academic ability. This strategy is also applied at School D.

“Our principal made an arrangement with her. If we refer learners (with medical aid) to her, then she helps learners without medical aid for free at the school. At this stage she only helps the learners in the Foundation Phase.” (Teacher 2, School A).

Dietary control focuses on careful planning of the learner’s diet to avoid worsening the hyperactivity, as dietary intolerances have been shown to exacerbate ADHD symptoms (see section 2.4.2). This strategy has been applied by School D.

“But luckily our tuck shop made a change, they don’t sell those cheap sweets anymore. They sell fruit and milk and water. And it makes a difference, especially with the ones that are hyperactive and who is not on medication.” (Teacher 3, School D).

4.3.2.6 Needs concerning ADHD

Since 2001 all mainstream schools are required to include learners with learning barriers and disorders such as ADHD in the classroom. However, teachers are finding the practical implementation of this policy extremely challenging due to large classes, heavy workload and a lack of knowledge. This view is supported by Kos (2004) who conducted a study during which primary school teachers’ knowledge, attitudes, and behaviour toward learners with ADHD were analysed. He came to the conclusion that teachers experience numerous obstacles with ADHD learners within mainstream schools. When asked, “What may prevent you from implementing such (inclusion) strategies?”, 50 % of the teachers indicated that the most common obstacles are time and the number of learners in the classroom. Furthermore, it became evident that some educators are extremely negative towards the implementation of inclusive education strategies. Teacher 1 from School E was quite verbal about this:

“And you know, they are now busy in South Africa with all inclusive, they want the blind, the hearing impaired, the paralysed, all in one class. And you know what? It is not going to work!”

The overwhelming majority of participants were all in agreement that there is a need for teachers to be trained in the practical aspects of managing ADHD learners in mainstream classrooms. Teacher 1 from School B held the opinion that workshops would be beneficial in providing guidance as to managing ADHD learners and related learning barriers:

“I don’t think just discussions will help. A workshop will help to really know what is going on. It is a training way to go. So I think they can come and give us a little bit more guidance, but you really need specialists in that direction.”

This was supported by Teacher 1 from School A who suggested that training would be especially beneficial to young teachers as well as student teachers:

“Yes, but I feel that will be especially beneficial for both young teachers and student teachers to attend a workshop. It will be good for them to attend such workshops and training so that they have the necessary knowledge before they have to stand in front of a class. I really do think it will be a good thing. Nothing can prepare you for that first time you are faced with the responsibility, but at least when you have the knowledge it will help.”

Several participants expanded on the need for training by suggesting that parents should also attend workshops. Teacher 1 from School B was of the opinion that the workshops should focus on *how they must handle it at home*”.

“That’s where it starts, if we can only get workshops for the parents, it would help a lot.” (Teacher 4, School D)

For effective teaching and learning to take place, teachers need to be supported by the Department of Education which needs to recommend specialists in the field of special needs education as well as specialists who are qualified to deal with learning barriers such as ADHD. The data from the interview transcripts revealed that there was an urgent need for special needs as well as supporting teaching classes to be re-instated in schools. Walton, Nel, Hugo & Muller (2009) emphasise that support personnel play a pivotal role in the inclusive educational system. Mainstream teachers should have the support of teachers with specialist training in special needs education as well as therapists in order to provide support to ADHD learners, either in the classroom or on a ‘pull-out’ basis.

“For me it would be wonderful if we could have a class like that. If we could have a class...years ago there was a remedial teaching class.....I don’t know if you can remember it. In a school, not a teacher teaching one by one, but a remedial teaching

class. Those children are taken from their classes....there is now a specific class catering for their needs.” (Teacher 2, School A)

Apart from re-instating special needs and support classes, it emerged that there is a need for a properly functioning Education Support Centre which is easily accessible to teachers. In addition, Teacher 2 from School A also suggested that each school should have a permanent occupational therapist, someone who specialises in treating a variety of learning disorders and barriers:

“I’d say, if one has an occupational therapist, as we now have, you know, twice a week – that a school should have its own occupational therapist. Someone that is trained properly....who is then employed by the DoE in the same way teachers are appointed....so that the school has its own therapist.”

Further suggestions that were forthcoming from teachers at School D were to place learners in classes according to their academic ability. Classes with learners with lower academic ability should be kept small to allow the teacher to spend quality, individual time in developing them. This need was emphasized by Teacher 1 from School E as follows:

“Do you know how strong those would be at the end of the year, because I would be able to focus on those 10 children throughout the day. They would then be able to pass just as well as the other learners.”

Despite all participants being cooperative in expressing their needs and providing suggestions, the majority seemed to be extremely negative and pessimistic about the likelihood that schools and the DoE would implement their suggestions.

The following opinion was expressed by Teacher 2 from School B:

“Many schools have no RE and the RE does not function the way that it is supposed to be...the ideal smaller classes never happen..., in fact they are becoming larger. So

you can come forward with the most wonderful suggestions but it is never going to happen."

4.4 CONCLUDING REMARKS

As the interviews progressed it became clear that the attitude towards, knowledge and management of ADHD was different at each school. It emerged that the attitude of the senior teachers influenced the younger teachers. The senior teachers at Schools A, B and D were positive about ADHD and influenced their peers likewise. They all seemed to have empathy with the daily struggles of the ADHD learner both inside and outside of the classroom. However, they still seem to struggle with the frustrations of overcrowded classrooms. All the participants at these three schools indicated a need for training which would focus on ADHD and particularly its management. They seemed very eager to acquire specialist skills to assist ADHD learners and limit their frustrations. Support at these schools is provided by outside therapists and special needs teachers working together with other teachers to address learning barriers.

Teachers from School E were extremely negative towards accommodating ADHD learners in their classrooms. Knowledge of ADHD and its identification varied within the group. The younger teachers seemed to be more knowledgeable and they readily discussed examples of ADHD learners they have encountered. The senior teacher at this school indicated that she had only had one ADHD learner in her entire teaching career.

School C made a disappointing impression on me. The knowledge levels regarding ADHD, identification and management were extremely low. However, it was clear that they have all encountered learners who displayed ADHD behaviour and that they were eager to attend training workshops. It seems that the teachers at this school do not receive the much needed support in addressing learning barriers.

Knowledge levels of ADHD were by and large at an average level. Some teachers were familiar with ADHD as well as the different types whereas some had no knowledge at all. A general lack of knowledge was displayed regarding management of ADHD in terms of

behavioural interventions in the classroom. Most of the teachers agreed that medication is the most effective treatment for ADHD. Teachers from school E regarded medication as an effective solution to their frustrations with the behaviour of their ADHD learners.

Contrary to the information presented by the SA who indicated that training on the management of learning barriers (including ADHD) was provided to all schools (management teams) in the Lejweleputswa District, all teachers were unanimous about the fact that they have never received any training from the DoE. This charge could arguably be laid at the door of the principals and the School Management Teams which were supposed to extend their training by the DoE to their teaching staff. Another possibility may be that teachers didn't attend training sessions due to their negative attitudes towards inclusive education. It was also noteworthy that no mention was made of the SA visiting schools or attending SBST meetings, in fact, very few teachers mentioned the role of the SBST.

This raises serious concerns as ADHD is prevalent in all Foundation Phase classrooms. Questions arise as to whether teachers received training or whether they chose to discount the knowledge presented to them at these workshops due to their negative attitude towards inclusive education. Another explanation for teachers denying that they received training about ADHD management might be that the training was directed at differentiated education. But then again, the SA mentioned that ADHD was specifically addressed during these training sessions. Furthermore, the DoE provided workshops regarding barriers to learning, which included ADHD, every second year. It seems then that the question remains as to why the majority of participants denied receiving such training.

At a recent Teachers Upfront seminar, Dr Tsediso Michael Makoelle of the University of Johannesburg said that "...it's often teachers who distort what inclusive pedagogy means and who themselves are barriers to inclusion. Some teachers think it's time consuming, it can't be done, and that it's only for specialist teachers in special schools" (Dale-Jones, 2014:3). He emphasised that inclusive education can be successful should teachers change their perceptions about including all learners in the classroom, irrespective of their learning barriers.

Landsberg et al. (2005) also cautions that teachers should accept responsibility for all the learners in their classroom, including those who are diagnosed with learning barriers. Pijl and Meier (1997:9) maintain that inclusive education can only be successful if teachers elicit an attitude of acceptance towards all learners. However, teachers should have sufficient support and resources to teach and assist all learners, an ideal which still remains unattained at all the participating schools.

The following table provides a detailed summary of the responses received from the focus group interviews within each theme.

Table 4.5: Summary of themes and responses from teachers

THEME	RESPONSES
Knowledge and Training	<p>Knowledge</p> <ul style="list-style-type: none"> • There was a general understanding of the terminology of ADHD • Most of the teachers were able to identify typical ADHD related behaviours • Disagreement on intelligence • Teachers with more teaching experience are able to identify ADHD learners • General lack of knowledge about management of ADHD <p>Training</p> <ul style="list-style-type: none"> • Formal training only included a general understanding of ADHD for younger teachers • Formal training of older teachers did not include any training on ADHD • No formal training programme included the management of ADHD in the classroom • No informal training was attended for the management of ADHD in the classrooms • Informal workshops were attended where ADHD was merely mentioned

	<ul style="list-style-type: none"> • Majority of teachers agreed that knowledge of ADHD and its management was obtained through informal research and via colleagues • Teachers were all in agreement that they are not adequately trained to manage ADHD learners in the classroom
Prevalence of ADHD	<p>In the classroom</p> <ul style="list-style-type: none"> • Teachers from the majority of schools indicated that they have at least one ADHD learner in their classroom • The majority of teachers agreed that they have learners whom they suspect to have ADHD, but they have not been tested • Teachers agree that the prevalence of ADHD tend to increase <p>Prevalence of typical ADHD behaviour</p> <p><i>A list of behaviours were discussed individually (see discussion in section 4.4.2.3)</i></p> <ul style="list-style-type: none"> • All teachers agreed that these behaviours are present in ADHD learners • Majority of teachers indicated that most of these behaviours were also present in non-ADHD learners
Impact of ADHD	<p>In the classroom</p> <p>ADHD learners :</p> <ul style="list-style-type: none"> • often disrupt the class • distract other learners • experience negative attitude from other learners • cause conflict • can function better in normal classroom setting while on medication <p>On teachers' emotional condition</p> <p>The majority of teachers explained the teaching experience of ADHD learners as</p>

	<ul style="list-style-type: none"> •difficult •requiring a lot of patience •tiring •emotionally draining <p>On teachers' attitude towards learner</p> <ul style="list-style-type: none"> •Senior educators from schools A, B and D were positive and displayed compassion with ADHD learners and their learning barriers <p>Concerns</p> <ul style="list-style-type: none"> •Teachers raised concerns regarding their workload while having to cope with learning barriers in the classroom
Support Systems in place	<p>DoE</p> <ul style="list-style-type: none"> •Teachers from School A have a good working relationship with the Subject Advisor •The majority of teachers from other schools were negative about support from DoE <p>Institution</p> <ul style="list-style-type: none"> •Majority of schools only provide special needs education once the learner is at risk of failing academically •Majority of teachers were negative about support provided by the school to teachers •Teachers from the private school are supported by their institution <p>Parents</p> <ul style="list-style-type: none"> •Predominantly negative responses were received regarding cooperation from parents •All teachers agree that a good working relationship is required •Majority of parents consider medication as a solution •Financial restraints were identified as a barrier to treatment

Management Strategies	<p>Teachers</p> <ul style="list-style-type: none"> • Majority of teachers apply seating position as a strategy • Medication is considered to be one of the main effective strategy • Large number of teachers stated that they are too busy to apply extra strategies • Individuals stated that they use time-out and stress balls <p>Institution</p> <ul style="list-style-type: none"> • Schools A, B and D have fully functioning special education classes, but they do not function as in the past • Learners are not provided with one-on-one sessions in special classes anymore • Schools A and D make provision for occupational therapists twice a week, during which barriers such as ADHD are addressed • While special classes are used for learners at risk of failing academically at the majority of schools, at some schools learners are accommodated in a special needs class, while learners experiencing barriers to learning are accommodated in remedial sessions • ADHD learners are referred to therapists at School A and School D
Needs	<ul style="list-style-type: none"> • Smaller classrooms • Training on the management of ADHD in the classroom • Information workshops for parents

4.5 CONCLUSION

In this chapter I presented the findings of the empirical investigation. The chapter entailed the analysis of the research findings after an in-depth interview was conducted with the SA of the Foundation Phase and focus group interviews with 43 Foundation Phase teachers in the Lejweleputswa District. I indicated how data from the interview transcripts and field notes were analysed by identifying the main themes and categories. In addition, the

research findings resulting from the emergent themes were discussed using the participants' verbatim accounts. Furthermore, appropriate theories as well as relevant evidence from the literature study conducted in chapter two, were used to support the findings. On the whole, conducting the interviews provided a gratifying experience. However, I was shocked and saddened by the knowledge levels of participants at School C.

The following chapter, which is the final chapter, will provide recommendations to address the problem of managing ADHD learners in the Foundation Phase classrooms, outline the limitations of the study, and demarcate areas for further research.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The problem investigated in this study was the management of ADHD learners in the Foundation Phase in primary schools in the Lejweleputswa district of the Free State province. This study sought to achieve the following specific objectives as stated in Section 1.4:

- To determine the level of teachers' training and knowledge on inclusive education practices, with special reference to ADHD.
- To verify the stance of the DoE on inclusive education (including ADHD) as reflected by its official documents, and determine how, according to their officials, is it implemented.
- To determine how teachers deal with ADHD-related behaviour such as inattention, hyperactivity, impulsivity, daydreaming and depression.
- To establish which support systems are in place for teachers to deal effectively with learners diagnosed with ADHD.
- To provide recommendations on addressing the needs and management of ADHD sufferers in the classroom.

I conducted an in-depth investigation of relevant literature to establish the causes and characteristics of ADHD. Furthermore, I endeavoured to determine empirically the impact of ADHD on both teachers and learners, and provide recommendations on the management of ADHD in the Foundation Phase classroom. This was based on the literature reviewed in Chapter two and the research findings of the empirical investigation in Chapter four. Chapter three attended to the qualitative research design and methodology.

In this chapter, conclusions are drawn from both the literature study and empirical investigation. Subsequently, recommendations are put forward for the management of

ADHD in mainstream classrooms. Themes for further study are also provided, and the limitations of the study are discussed.

5.2 SUMMARY OF THE LITERATURE STUDY

Chapter one highlighted the impact of ADHD and the educational challenges it presents to both learners and teachers (Section 1.1). ADHD-related behaviour displayed by ADHD learners impact negatively on their social and personal lives as well as on the teaching and learning process (Section 1.3). Teachers are seriously challenged by the introduction of the White Paper 6 (2001) on Inclusive Education and its implications for mainstream schooling. Simultaneous management of ADHD learners and other learning barriers and social problems in a mainstream classroom seem to cause frustration and negativity amongst teachers. Consequently, the academic and emotional development of ADHD learners within mainstream schools are seriously compromised (Section 1.3).

Chapter two provided a historical background of ADHD followed by a discussion on different aspects of ADHD, such as types, prevalence and treatment. Moreover, various factors playing a significant role in causing ADHD were explored (Section 2.4). From the literature study I concluded that at least three factors contribute significantly to the phenomenon, namely medical factors (Section 2.4.1), environmental factors (2.4.2) and educational factors (2.4.3). Chapter two also dealt with a comprehensive literature review on the impact of ADHD on the learner's performance in the classroom as well as his social and academic development (Section 2.7.1). It was established that teachers seem to have inadequate knowledge of the management of ADHD and are facing numerous challenges in this regard (Section 2.7.2). Chapter two also considered both international and national initiatives and policies which are in place to address learning barriers such as ADHD (Sections 2.8 & 2.9).

Section 2.10 dealt with an in-depth investigation into the various models designed to explain ADHD and ADHD-related behaviour of learners. Six models were discussed, each providing a particular perspective on how the condition should be understood and what needs to be considered when ADHD learners are managed. These models were the *Conceptual Model of ADHD* (Section 2.10.1), *Barkley's Model of ADHD* (Section 2.10.2), the

Brown Model of ADHD (Section 2.10.3), the *Cognitive Energetic Model* (Section 2.10.4), Bronfenbrenner's *Ecological Model (Systems Theory)* (Section 3.2.5) and the *Medical Model* (Section 3.2.6).

5.3 SUMMARY OF THE EMPIRICAL INVESTIGATION

Findings from the literature study provided a theoretical framework which guided the empirical investigation, as discussed in Chapters three and four. The aim was to determine the impact of the main research problem from a phenomenological perspective using a qualitative design (Section 3.4). The data were collected by means of social interaction (focus group interviews) with participants in their school settings (Section 3.6.3.1), and a one-on-one interview with the Subject Advisor (SA) of the Foundation Phase in the district.

Various ethical measures such as informed consent, voluntary participation, permission to tape-record interviews, anonymity and confidentiality were considered to ensure that the participants' rights were protected and not violated in any way (Section 3.6.1). Accordingly, the interviews were tape-recorded and transcribed verbatim (Section 3.6.1.4). The data were then analysed in terms of Lincoln and Guba's model and four criteria (truth value, applicability, consistency and neutrality) were employed to ensure the trustworthiness of the empirical findings (Section 3.6.2). The interview transcripts were then analysed and emerging themes, categories and sub-categories were identified and developed (Sections 4.2.2 & 4.3.1). This process assisted me with content analysis and interpretation.

5.4 CONCLUSIONS FROM THE LITERATURE STUDY

After a comprehensive literature survey, the following themes were highlighted:

- The concept of ADHD
- ADHD in the educational context
- Management of ADHD in schools

5.4.1 The concept of ADHD

Attention deficit disorder (ADHD) is a term widely used to diagnose individuals who display a wide range of symptoms, such as an inability to concentrate, anger outbursts, emotional instability, inability to complete a task and impulsivity. Initially ADHD was referred to only as ADD (excluding the H which indicates “hyperactivity”), but researchers have identified different types or categories of “attention deficiency” (Section 2.3).

The literature study confirmed that there are three types of ADHD (Section 2.3). After discussing the characteristics and different types of ADHD in Section 2.3, I concluded that inattention and impulse control seem to be more dominant factors than hyperactivity. Research further confirmed my suspicions that ADHD has no single, specific cause (Section 2.4), but that various factors play a contributing role. The medical factors, as discussed in Section 2.4.1, emphasised the role played by genetics, neurology and bio-chemistry as potentially causative factors associated with ADHD. Based on the information offered in Section 2.4.2, I concluded that environmental factors may contribute to the aggravation of ADHD symptoms. The educational factors (Section 2.4.3) are based on the transactional model and I found that should the teacher not meet the learner’s needs, there will not be proper brain stimulation which may hamper the development of the learner.

Section 2.5 confirmed that ADHD affects 3-5 % of diagnosed children in South Africa, which boils down to approximately 1 child in every classroom. ADHD is usually diagnosed in learners of school-going age across cultures and geographical regions. The signs or symptoms normally appear before the age of 7 and boys are more prone to the condition. In addition, the treatment of ADHD (Section 2.6) emphasised that serious consequences are imminent for ADHD learners who do not receive adequate treatment.

5.4.2 ADHD in the educational context

A typical classroom setting requires the learner to sit still, listen to the teacher, pay attention, follow instructions and concentrate on tasks (Section 2.7.1). It is highly probable that foundation phase learners experience disappointment each time they fail to do so.

Section 2.7.1 confirmed the seriousness of ADHD - sufferers find it difficult to cope in the classroom (Section 2.7.1.2) and their academic development is compromised (Section 2.7.1.3). There are, however, some positive traits associated with ADHD and it is crucial that teachers are familiar with them. ADHD learners may excel in some areas which could provide the teacher with a window of opportunity to motivate and connect with the learner (Section 2.7.1.5). Section 2.7.2 highlighted the importance of appropriate knowledge of the disorder for the effective addressing of symptoms. After discussing knowledge levels of teachers (Section 2.7.2.2) as well as teacher training (Section 2.7.2.1), I concluded that there is a substantial lack of knowledge about the management of ADHD learners amongst South African teachers. In addition, inclusive education is becoming a reality in South Africa and a growing number of learners display ADHD related behaviour. Teachers face numerous challenges and frustrations which may cause them to experience negative emotions (Section 2.7.2.3) towards these learners and to inadvertently discriminate against them. Teachers need to adapt their classroom management strategies in order to support the academic development of these learners (Section 2.7.2.4.). Successful programmes for learners with ADHD should integrate academic instruction, behavioural interventions and classroom accommodations.

5.4.3 Management of ADHD in schools

In Section 2.9.2 it was confirmed that numerous policies providing strategies for the management of ADHD in the classroom, are available internationally. In some countries learners diagnosed with ADHD qualify for special education services, which may include classroom accommodations and modifications. The South African Department of Education introduced the *Education White Paper 6* in 2001 (Section 2.9.1) which entails an action plan aimed at enabling all learners with disabilities to learn and develop to their full potential. To date little has been done to implement this inclusive education plan, particularly so with regard to learners suffering from ADHD. ADHD was only included as a learning barrier in the National Education Policy Act No. 27 of 1996 as an amendment in 2014. The question remains whether South African teachers will be trained in implementing these accommodations for ADHD learners.

In order to better understand the condition, six models of ADHD were studied (Section 2.10). According to the *Conceptual model* (Section 2.10.1) and the *Medical model* (Section 2.10.6) maladjustment or mental illness are responsible for the negative behaviour in ADHD children, and it is proposed that they be referred to health agencies for treatment and rehabilitation (Section 2.10.6). This view is inconsistent with the *Ecological model* (Section 3.2.5) which proposes that there are levels of interacting systems resulting in change, growth and development of the individual. In the field of inclusive education, this model has much relevance in emphasising the interaction between the learner's development and the systems operating within his/her social context. Similarly, the *Cognitive Energetic model* (Section 2.10.4) propagates that the ADHD learner may experience deficits in areas such as activation and effort. This seemingly stems from their psycho-physiologically under-arousal in the classroom. These two models can be useful in understanding classrooms, schools, learners and families by viewing them as multi-level interrelated systems.

After studying both the *Brown Model of ADHD* (Section 2.10.3) and *Barkley's Model of ADHD* (Section 2.10.2) it emerged that the ADHD learner typically lacks internal motivation and consequently struggles to sustain goal-directed behaviour. These models assert that certain executive functions in ADHD learners', for example working memory, are malfunctioning. As a teacher and mother of an ADHD child, I believe that these two models describe the condition, particularly the ADHD child's behaviour, most accurately and may promote a better understanding amongst teachers and help them to foster empathy towards these learners.

5.5 CONCLUSIONS FROM THE EMPIRICAL INVESTIGATION

The five main themes that emerged from the empirical investigation (table 4.1 & 4.3) were teacher knowledge of and training in ADHD, the prevalence of ADHD in the classroom setting, the impact of ADHD, support systems in place for teachers and learners, the management strategies employed in the classroom and the needs of both teachers and learners as seen through the eyes of the participants.

5.5.1 Teacher knowledge and training

Data from the interviews with teachers revealed that a general understanding of the term 'ADHD' exists (Section 4.3.2.1). However, this does not apply to School C (rural school) where a total lack of knowledge was evident. Although several participants indicated that it is difficult for a teacher to identify the different types of ADHD, all of them were able to identify typical ADHD related behaviours, except School C. It transpired that teachers with more teaching experience are better able to identify the types, but a substantial lack of knowledge about the management of ADHD in the classroom setting was apparent.

Contrary to the information presented by the Subject Advisor from the DoE who indicated that training on the management of learning barriers, including ADHD, was provided to all schools in the Lejweleputswa District (Section 4.2.3.1), all teachers were in agreement that they never received any training. The majority of the participants indicated that they obtained their knowledge and management of ADHD by means of informal research and via colleagues.

5.5.2 Prevalence of ADHD

In view of the fact that the Subject Advisor from the DoE personally made several referrals for concessions during a single year, it is evident that ADHD is a reality in the Foundation Phase within the Lejweleputswa District. The data revealed that the prevalence of ADHD tends to increase (Section 4.3.2.2) and participants from the majority of schools indicated that they have at least one ADHD learner in their classroom at any given stage (Section 4.3.2.2.). Furthermore, many participants suspected that there might be cases where ADHD learners have not been identified. From the list of ADHD related behaviours as discussed in Section 4.4.2.3, it became evident that some of these behaviours are also displayed by non-ADHD learners, hence my view that effective management of ADHD in primary schools may benefit all learners in the classroom.

5.5.3 The impact of ADHD

Data from the interviews confirmed that the most common impact factors associated with ADHD learners in the classroom (Section 4.3.2.3.) are disruption of classes, distraction of other learners, experiencing of negative attitudes from their peers and causing conflict within the classroom setting. Although senior teachers from three schools (A, B and D) showed signs of empathy with the daily struggles of ADHD learners, the majority regarded their interaction with these learners as difficult, emotionally draining and demanding considerable patience (Section 4.3.2.3.). In addition, they also seem to struggle with the frustrations of overcrowded classrooms. It became clear that teachers who experience frustration tend to exclude these learners from mainstream activities in the class.

5.5.4 Support Systems in Place

Data from the focus group interviews revealed that only two schools have a good working relationship with the Subject Advisor. The majority of teachers from the other schools were quite vocal about the lack of support by the DoE (Section 4.3.2.4.). Although the majority of participants agreed that a good working relationship with parents is important, the majority of responses indicated a lack of parental cooperation. From the interviews it transpired that the majority of parents consider medication as the only solution to addressing ADHD in their children (Section 4.3.2.4.).

5.5.5 Management Strategies

The data from the interviews with both the Subject Advisor and teachers confirmed that several strategies can be applied to manage ADHD learners in the classroom. These included seating arrangements, time-out and stress balls (Section 4.3.2.5 & 4.2.4.5). Of concern were the facts that medication is considered to be the main effective treatment strategy (Section 4.3.2.5) and that a large number of participants indicated that they are too busy to apply additional strategies.

It emerged that ADHD is supported on institutional level at only two schools (Schools A and B) (Section 4.3.2.5.) by utilising the services of outside therapists and specialised teachers working closely with the internal teachers to address learning barriers. This is aimed at learners with limited financial resources, with the understanding that learners with medical aids or the financial means are referred to these therapists for treatment outside the school setting.

5.5.6 Needs

All the focus group participants indicated a need for training that focuses on ADHD and specific strategies to manage it (Section 4.3.2.6). They seemed very eager to acquire specialist skills in this regard to help limit their frustrations. Interviews with both the Subject Advisor and teachers confirmed the need for special needs intervention as well as support teaching classes to be re-instated in schools (Section 4.3.2.6). In addition, it emerged that there is a direct need for a properly functioning Education Support Centre which will be easily accessible to both teachers and learners (as was the case in the previous dispensation [Section 4.3.2.6]).

5.6 RECOMMENDATIONS

Based on the research findings derived from the views of the participants, the following recommendations are put forth:

5.6.1 The role of the Department of Education in addressing the management of ADHD learners

- The Department of Education has a pivotal role to play in providing schools with direction regarding inclusive policy implementation (Education White Paper 6 of 2001, Guidelines for Inclusive Learning Programmes and the National Education Policy Act 27 of 1996) as well as specialist support services and support centres for learners experiencing barriers to learning. I therefore recommend the following to the Department of Education:

- All schools should have copies of all relevant inclusive policy documents, especially the amendments made to the National Education Policy Act No. 27 (1996) in 2014. Annexure C of this Act was published during May 2014 in the Government Gazette, approving amendments to the conduct, administration and management of examinations and assessments. All stakeholders (principals, teachers and parents in particular) should be informed about these documents.
- Training of teachers should focus on differentiated teaching and methods of assessment as well as concessions outlined in the above Act to support all learners who experience barriers to learning.
- Regular training on the management of learners with barriers, in particular ADHD, is crucial. I recommend that a training programme be drafted on an annual basis, outlining specific dates for training on different aspects of learning barriers. The training schedule should be forwarded to schools at the beginning of each academic year. The dates should be strictly adhered to and the commitment of all stakeholders is important.
- Special needs intervention (support teaching classes - the former 'remedial' system) should be re-instated in schools. This should not be seen as a violation of inclusive strategies, but rather as much needed support to both teachers and learners. Fully functioning Departmental Education Support Centres where ADHD learners can be referred to for specialist therapy and assistance, should be established.
- A close working relationship between all schools and the respective Subject Advisors and other officials from the DoE, should be established. This is crucial for rural and disadvantaged schools where a substantial lack of support was identified in my study. District officials should make an effort to engage with these schools by means of regular visits and consistent support.

5.6.2 The role of the teacher in addressing ADHD in the classroom

The role of the teacher in supporting and assisting all learners who experience barriers to learning cannot be overemphasised. Teachers play a pivotal role in observing and identifying children in their classrooms who exhibit ADHD behaviour, and in devising an appropriate management plan. Based on the findings of my study, the following recommendations are made with the aim of helping teachers to manage disruptive behaviour and assist ADHD learners in their overall development.

5.6.2.1 Teacher attitude

Teachers should be flexible and willing to accommodate the needs of these learners. It might be necessary to make environmental changes (such as seating arrangements), resulting in a less frustrating classroom environment for both teacher and learner. A commitment to acquire knowledge of ADHD and related barriers may assist them in better understanding the condition. This will ensure a supportive relationship between teacher and learner. While they require patience and support, focusing on their positive traits and rewarding positive behaviour may alleviate frustration.

5.6.2.2 Seating arrangements

Sensible seating arrangements can lower the frustration levels of both learners and teachers. Learners should be seated close to the teacher or next to model learners with sound learning habits. Furthermore, the ADHD learner should be seated away from windows and the classroom door as these may cause distractions. Physical obstructions between the teacher and the learner should be minimised so that the learner can be reached quickly and easily when necessary. Eye contact with the learner is also very important as it enables the teacher to notice inattention and other unwanted behaviour immediately.

5.6.2.3 An organised environment

Very specific class rules are important, but it is recommended that the teacher should refrain from implementing a behaviour management system that focuses on negative reinforcement. At the beginning of each year the teacher should inform learners about the rules and procedures of the classroom, e.g. what they should do when they finish their work early or what to do when they need clarification on an instruction. The noise levels in the class should also be controlled because it may encourage poor attention and hyperactivity. Verbal instructions must be brief and simple and learners must at all times feel free to ask questions.

5.6.2.4 Dealing with inattention and self-management

Clear instructions and directions are important. Follow up should be done by asking questions such as “What must you do?” or “How will you complete this assignment?”. It will be of great help if the teacher breaks up instructions and tasks in smaller chunks at a time, especially during the teaching phase. This will assist learners who have difficulties in following multi-step directions due to distractibility and short-term memory deficits.

5.6.2.5 Dealing with disruptive behaviours

Since these learners tend to fiddle or play with pencils an acceptable alternative could be provided, such as a stress ball to squeeze or a yoga ball to sit on. Furthermore, Foundation Phase learners typically want to please their teachers and verbal reinforcement of appropriate behaviour can be used to the teacher’s advantage to encourage positive behaviour. It may also be useful to recognise a learner’s effort in improving their behaviour, even if the target behaviour has not been perfected yet.

5.7 RECOMMENDATIONS FOR FURTHER STUDY

Based on this study, the following recommendations are made for further study:

- Since only the Subject Advisor of the Foundation Phase at the DoE and teachers of primary schools formed part of the study, further studies should incorporate the viewpoints of ADHD learners and their parents as well, so as to add to the body of existing knowledge about the phenomenon.
- This study focused on the Foundation Phase in primary schools. Further studies on the same phenomenon could be researched in secondary schools as well.
- Future research could explore the type of training teachers receive in ADHD, the accuracy of the information provided and how training in the management of ADHD leads to improved classroom practices.

5.8 LIMITATIONS OF THE STUDY

The limitations of the study include the following:

- This study entailed eliciting the viewpoints of teachers and one DoE representative on the management of ADHD in the Foundation Phase of primary schools and as such, only the viewpoints of these participants were included in this study. It is important to recognise the subjective nature of the data collected, since it deals with teachers' *perceptions* of ADHD and ADHD learners as well as their classroom difficulties. Perceptions may differ significantly from one teacher to another.
- The sample consisted of 43 participants which means that the results cannot be generalised to the wider primary school population. Furthermore, only schools in the

Lejweleputswa District were targeted which could also impact on the external validity of the results.

5.9 CLOSING REMARKS

This study set out to explore ADHD in the Foundation Phase in primary schools in the Lejweleputswa District. It further sought to establish the management strategies that are applied as well as support systems in place at both institutional and Departmental level. A qualitative research design and methodology was adopted to investigate the phenomenon of ADHD management in mainstream classrooms through an interview process with participants from primary schools, and a representative from the DoE. The research adhered strictly to ethical principles and was also evaluated for trustworthiness.

During the research process I became acutely aware of the extent of the lack of appropriate knowledge of ADHD and its management strategies, especially in the rural school. I believe that a heightened awareness of ADHD was raised amongst the participants during the interviews. Significantly, the findings from the empirical investigation concurred with the findings of the literature study in this regard. According to the Education White Paper 6 (2001) "Inclusion is about supporting all learners, educators and the system as a whole so that the full range of learning needs can be met. The focus is on teaching and learning actors, with the emphasis on the development of good teaching strategies that will be of benefit to all learners."

"What will be required of us all is persistence, commitment, co-ordination, support, monitoring, evaluation, follow-up and leadership".

(Education White Paper 6, 2001:4).

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APPENDIX A

DSM-IV-TR CRITERIA FOR ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

DSM-IV-TR CRITERIA FOR ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

Individual must criteria for either inattention (1) or hyperactivity (2):

(1) six (or more) of the following symptoms of inattention have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Inattention

(a) often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities

(b) often has difficulty sustaining attention in tasks or play activities

(c) often does not seem to listen when spoken to directly

(d) often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behaviour or failure to understand instructions)

(e) often has difficulty organizing tasks and activities

(f) often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)

(g) often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)

(h) is often easily distracted by extraneous stimuli

(i) is often forgetful in daily activities

(2) six (or more) of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity

(a) often fidgets with hands or feet or squirms in seat

(b) often leaves seat in classroom or in other situations in which remaining seated is expected

(c) often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)

(d) often has difficulty playing or engaging in leisure activities quietly

(e) is often "on the go" or often acts as if "driven by a motor"

(f) often talks excessively

Impulsivity

(g) often blurts out answers before questions have been completed

(h) often has difficulty awaiting turn

(i) often interrupts or intrudes on others (e.g., butts into conversations or games)

A. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.

B. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] and at home).

C. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.

D. The symptoms do not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and are not better accounted for by another mental disorder (e.g., Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder).

Code based on type:

314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type: if both Criteria A1 and A2 are met for the past 6 months

314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type: if Criterion A1 is met but Criterion A2 is not met for the past six months

314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type: if Criterion A2 is met but Criterion A1 is not met for the past six months

Coding note: For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, "In Partial Remission" should be specified.

314.9 Attention-Deficit/Hyperactivity Disorder Not Otherwise Specified

This category is for disorders with prominent symptoms of inattention or hyperactivity, impulsivity that do not meet criteria for Attention-Deficit/Hyperactivity Disorder

APPENDIX B

Approval to conduct research.
Letter from Department of Education



Enquiries: LV Alexander
Reference: 18/4/1/04 - 2013

Tel: 051 404 9283
Fax: 086 6678 678
E-mail: research@edu.fs.gov.za

2013 – 01 – 21

Mrs R. Nel
33 Kok Street
St Helena
WELKOM
9460

Dear Mrs Nel

REGISTRATION OF RESEARCH PROJECT

1. This letter is in reply to your application for the registration of your research project.
2. Research topic: **CLASSROOM MANAGEMENT OF ATTENTION DEFICIT HYPER-ACTIVITY DISORDER LEARNERS IN THE FOUNDATION PHASE.**
3. Your research project has been registered with the Free State Education Department.
4. Approval is granted under the following conditions:-
 - 4.1 The name of participants involved remains confidential.
 - 4.2 The questionnaires are completed and the **interviews are conducted outside normal tuition time.**
 - 4.3 This letter is shown to all participating persons.
 - 4.4 A bound copy of the report and a summary on a computer disc on this study is donated to the Free State Department of Education.
 - 4.5 Findings and recommendations are presented to relevant officials in the Department.
5. The costs relating to all the conditions mentioned above are your own responsibility.
6. **You are requested to confirm acceptance of the above conditions in writing to:**

**DIRECTOR: STRATEGIC PLANNING, POLICY AND RESEARCH,
Old CNA Building, Maitland Street OR Private Bag X20565,
BLOEMFONTEIN, 9301**

We wish you every success with your research.

Yours sincerely

**MJ MOTHEBE
DIRECTOR: STRATEGIC PLANNING, POLICY AND RESEARCH**

Directorate: Strategic Planning, Policy & Research - Private Bag X20565, Bloemfontein, 9300 – Room 301, Old CNA building,
Maitland Street, Bloemfontein 9300 - Tel: 051 404 9283 / Fax: 086 6678 678 E-mail: research@edu.fs.gov.za

APPENDIX C

Request to conduct Interviews

Letter to Principals of Schools

PO Box 285

WELKOM

9460

20 May 2013

The Principal
(Name...) Primary School
P.O.Box 88091
BRONVILLE
9473

Dear Principal

RE: PERMISSION TO CONDUCT RESEARCH / INTERVIEWS FOR A RESEARCH PROJECT

At present I am engaged in a research project towards my M.Ed (Masters in Education) degree at the Central University of Technology under the guidance of Dr JW Badenhorst. The research topic is *Classroom Management of Attention Deficit Hyperactivity Disorder Learners in the Foundation Phase in the Lejweleputswa Education District*. Since ADHD appears to be on the increase in our schools, the aim of this study is to investigate the impact of ADHD on teaching and classrooms management in primary schools.

For the purpose of this research, an interview will be conducted with a focus group of selected Foundation Phase teachers at your school. A copy of the questions to be discussed is enclosed for your perusal and approval. The interview should not take more than 1 hour. All the information obtained from the interviews will be dealt with in the strictest confidence and anonymity is assured.

I humbly request your written permission to conduct the interview.

Yours sincerely

.....

Mrs R Nel

082 976 4477

APPENDIX D

Request to conduct Interviews

Letter to Teachers

P O Box 285

WELKOM

9460

20 May 2013

Foundation Phase Teachers

(Name of School)

P.O. Box 55005

EERSTEMYN

9459

Dear Teacher

RE: PERMISSION TO CONDUCT RESEARCH / INTERVIEWS FOR RESEARCH PROJECT

At present I am engaged in a research project towards my M.Ed (Masters in Education) degree at the Central University of Technology under the guidance of Dr JW Badenhorst. The research topic is *Classroom Management of Attention Deficit Hyperactivity Disorder Learners in the Foundation Phase* in the Lejweleputswa District. Since ADHD appears to be on the increase in our schools, the aim of this research study is to investigate the impact of ADHD on teaching and classrooms management in primary schools.

As a teacher in the Foundation Phase, you may be aware of the fact that this phase in Education is one of the the key phases in human development and that you therefore have a great impact on the life of each learner in your class. Meeting the academic needs of a learner with ADHD in a regular classroom setting is challenging. In a research study

(Wheeler, 2007:355) it was found that while most teachers expect ADHD learners to be hyperactive, these learners actually display more inattention behaviour than hyperactive behavior. Furthermore, while learners in the Foundation Phase typically have a short attention span, learners with ADHD have an even shorter amount of focus time; usually only 10 – 15 minutes. Unfortunately many ADHD learners are never identified due to a variety of reasons, amongst which a very high IQ. According to the National Health institute of Mental Health(NHIMH), only 20 – 30 % of ADHD learners suffer from learning disorders. Identifying ADHD in the Foundation Phase is even more difficult as many of the symptoms of ADHD are considered to be normal behaviour of young learners.

For the purpose of this research an interview will be conducted with a focus group of Foundation Phase teachers at your school. During the interview we will discuss your views and opinions regarding ADHD learners in your classroom as well as the support you receive from the DoE. The interview should not take more than 40 minutes. All the information obtained from the interviews will be dealt with in the strictest confidence and your anonymity is assured.

I humbly request your written permission to be part of the focus group with which the interview will be conducted.

Yours sincerely

.....

Mrs R Nel

082 976 4477

APPENDIX E

Consent form

DoE Representative

RE: PERMISSION TO CONDUCT RESEARCH / INTERVIEW FOR A RESEARCH PROJECT

CONSENT FORM: Subject Advisor

I hereby agree to participate in the M.Ed Research project conducted by Rika Nel, a student at the *Central University of Technology*, which is titled:

Classroom Management of Attention-Deficit-Hyperactivity Disorder Learners in the Foundation Phase.

I understand that the interview forms the final part of the study and that my participation in the study will in no way compromise or prejudice me in any way. I furthermore understand that my name, personal details, opinions and responses will be strictly confidential, and it will not be divulged to anyone. I also understand that my participation in the study is voluntary, and that I may withdraw from the study at any stage, without fear or prejudice. I understand that I will not receive any cash benefits by my involvement in the study. I am also aware that the interviews will be audio-recorded and that all procedures relating to the interviews will be explained by the researcher.

Name of the researcher: Rika Nel

Contact Numbers: (Cell) 082 9764477, (W) 057 3522911

Name of Participant:

Signature:

Date:

APPENDIX F

Consent form

Principals

RE: PERMISSION TO CONDUCT RESEARCH / INTERVIEWS FOR A RESEARCH PROJECT

CONSENT FORM: (Name) Primary School

I hereby grant permission to *Rika Nel*, student at the *Central University of Technology*, to involve teachers from my school in the following study:

Classroom Management of Attention-Deficit-Hyperactivity Disorder Learners in the Foundation Phase in the Lejweleputswa Education District .

I understand that the research is for study purposes only, and the identities of all participants, the school, as well as the information supplied will be kept in strict confidence, and not divulged to anyone. I also understand that my teachers agree to participate voluntarily, and may withdraw participation from the research at any time without prejudice or penalty. I further understand that I will not receive any cash benefits for involving my teachers in the study, but I will have access to the findings, upon request. I am also free to contact the researcher to clarify any issues that may arise from the study.

Name of the researcher: Rika Nel

Contact Numbers: (Cell) 082 9764477, (W) 057 3522911

Name of Principal:

Signature:

Date:

APPENDIX G

Consent form Foundation Phase Teachers

RE: PERMISSION TO CONDUCT RESEARCH / INTERVIEWS FOR A RESEARCH PROJECT

CONSENT FORM:

I hereby agree to participate in the M.Ed Research project conducted by *Rika Nel*, a student at the *Central University of Technology*, which is titled:

Classroom Management of Attention-Deficit-Hyperactivity Disorder Learners in the Foundation Phase in the Lejweleputswa District.

I understand that the interview forms the final part of the study and that my participation in the study shall in no way compromise or prejudice me in any way, that my name, personal details, opinions and responses shall be strictly confidential and not divulged to anyone whatsoever. I also understand that my participation in the study is voluntary, and that I may withdraw from the study at any stage, without fear or prejudice. I understand that I will not receive any cash benefits by my involvement in the study. I am also aware that the interviews will be audio-recorded and that all procedures relating to the interviews will be explained by the researcher.

Name of the researcher: Rika Nel

Contact Numbers: (Cell)082 9764477, (W) 057 3522911

Name of Participant:

Signature:

Date:

APPENDIX H

Interview Schedule

DoE Representative

Classroom management of ADHD learners in the Foundation Phase	
Date of interview:	10 July 2013
Name of interviewee:	

In-depth interview - Interview questions

1.	Do you think that teachers know and understand what ADHD is?
2.	How often would you say teachers are faced with the challenge of managing ADHD learners in their classrooms?
3.	Does the DoE regard ADHD as a learning disorder ?
4.	There are two documents that serve as a guideline for inclusive education, namely <i>The Education White Paper 6, (2001)</i> and <i>The Guidelines for Inclusive Learning Programmes (DoE, 2005)</i> . Is ADHD included in these documents?
5.	How should teachers handle ADHD learners in the classroom setting?
6.	Do you think that the disruptive behaviour of ADHD learners will affect teachers' attitude and emotional condition/attitude towards these learner?
7.	Which support systems are in place at the DoE to help teachers manage ADHD and associated disruptive behaviours in the classroom?
8.	Do you feel that teachers are adequately trained to manage these learners successfully?
9.	What are your needs in this regard?

APPENDIX I

Interview Schedule Foundation Phase Teachers

Classroom management of ADHD learners in the Foundation Phase	
Date of interview:	
Name of School:	

Before we start with the interview, I would like to ensure you as teachers that this research is not for the purpose of evaluating your skills. The overall aim of this study is to investigate the impact of ADHD on teaching and classroom management in primary schools and to identify measures that can be implemented to alleviate the problem. We are specifically looking at the training, tools and support that teachers are receiving to cope with ADHD in the classroom.

- This interview is not meant to criticize you as educator, nor is it intended to evaluate your skills and knowledge
- We are merely trying to determine whether teachers are receiving support from DoE and how ADHD learners are currently being managed.
- All information will be dealt with in the strictest confidence.

ADHD learners often fall through the cracks of the Education system. Teachers are burdened with dealing with large groups in the classrooms as well as the diversity of different cultures and, of course, personalities. On top of this, the lack of discipline of learners at home places more stress on the teacher. Due to all of these abovementioned facts, a learner who suffers from ADHD but who may progress fairly well academically, may not receive the help he or she needs to focus and concentrate, since he or she may not be considered a *problem* in the classroom.

Focus group interview - Interview questions

- 1 What is your understanding of Attention Deficity Hyperactivity Disorder?
- 2 How often are you faced with the challenge of managing ADHD learners in your classroom? (Are you made aware of the fact that the learner has ADHD by the parents? Do you suspect that the learner might suffer from ADHD?)
- 3 What is the most common behavioural disorders associated with ADHD that you encounter? The ADHD learner.....
 - fails to give close attention to details
 - has difficulty finishing tasks
 - finds it difficult to organize tasks
 - has difficulty to focus attention to tasks
 - is easily distracted
 - fidgets with feet and hands
 - are emotionally sensitive
 - does not follow instructions immediately
 - has difficulty remaining seated
 - talks continually and often interrupts the teacher
 - blurts out answers before the teacher has finished the question
 - does not like homework or schoolwork that requires sustained mental effort
 - loses things which he / she would need for activities such as pencils and books
- 4 What influence do the above mentioned behaviours or disruptive behaviours have on the rest of the learners in the classroom?
- 5 How do you handle your ADHD learners?
- 6 How do these disruptive behaviours affect your attitude and emotions towards such a learner?

- 7 What support systems are in place at your school to help you to manage ADHD and associated disruptive behaviours in the classroom?
- 8 Did you receive training on management of ADHD learners during your formal training?
- 9 Did you receive additional training or attend workshops via your school on management of ADHD learners?
- 10 Do you feel that you are adequately trained to manage these learners successfully?
- 11 What are your needs in this regard?

APPENDIX J

Transcribed Interview

DoE Representative

SOUNDCLIP 136**Do you think that educators know and understand what ADHD is?**

Respondent: I think they do, Ek dink hulle moet, want weet jy wat, ek het hulle vir 7 Jaar opgelei en almal, almal, almal is opgelei in hierdie Distrik. Black, White, everybody. Dit was die inisiatief van die Direkteur so twee en 'n half Jaar terug. Ek het daardie manual geskryf, en ons het die goed vir hulle aangebied in groepe. Dit was omtrent 'n hele halwe jaar. So, as hulle nou vir jou se hulle weet nie, dan wil hulle jou net nie vir jou antwoord nie. Hulle was in groepe. Hulle moes deurkom. Kyk, dit was ten minste jou HOD's en jou hoofde. En hulle was veronderstel, met 'n CD wat ek vir hulle gegee het, met die manuals, en met die power point om dit te gaan cascade aan al die onderwysers. Dit was die inisiatief van die direkteur. ADHD, alles, alles was daarin. Alles...jou disleksie, aandagafleibaarheid.....Dit het gegaan oor gedifrensieerde onderwys. Hoe jy dit moet toepas in die klaskamer..... Hulle moes. As hulle dit nie gedoen het nie, dan weet ek nie.

Dis baie goed om dit nou te hoor.

Respondent: Ek kan jou die manual en die CD's gee as jy wil.

Baie dankie, dit sal baie gaaf wees.**Hoe dikwels, sou U sê, word onderwysers gekonfronteer met die uitdagings van ADHD-kindere in die klaskamer?**

Respondent: Weet jy, ek dink baie van hulle gaan dink hulle is stout, maar hulle is nie stout nie. En die ander ding wat ons ook moet onthou, is dat baie van hulle kan bietjie afwykend wees, wat hulle ook nie agter kom nie, want ek het al gesien dat hulle die kindere Ritalin gee

dan is daar nie die effek wat dit moet wees nie. Baie van die kinders moet dan eerder op 'n ander manier gehanteer word.

Ons kyk nou veral na die grondslagfase. Dink jy dat dit veral daar dalk misgekyk word en gesien word as stoutigheid?

Respondent: Kyk, hulle is nie so goed in die grondslagfase nie. Ek dink wanneer hulle dit regtig goed agterkom is van Graad 4 af. Wanneer hulle dit agterkom, want hulle het dan bietjie meer beweging....Hulle almal moet nog bietjie geleer word om disziplinêr dingetjies te doen, want hulle is nog gewoon om rond te loop en bietjie in die klas en te speel.

Met ander woorde u dink dit is moeiliker vir die grondslagfase om dit te identifiseer?

Respondent: En jy sit ook met jou taalprobleem. Moet ek vir jou uitbrei of wil jy graag hê ek moet vir jou uitbrei op die antwoorde of moet ek net vir jou antwoorde gee of wat gaan vir jou die maklikste wees?

Nee ons kan maar lekker gesels.

Repondent 1: Kyk, as hulle net daai eerste paar Yesre kan verstaan, dit kan ook maar vervelig wees, of hulle wil wegsteek.... hulle weet nie wat om te doen nie, dan raak hulle ook stout.

Kyk ons veral na kinders wat nie in hulle moedertaalonderig ontvang nie?

Respondent: Yes, jou kinders wat nie in hulle moedertaal ontvang nie Yes.

Dink Mevrou dat dit belangrik is, of 'n kind meer kan help as dit wel in die grondslagfase geïdentifiseer kan word?

Respondent: Ek kan nie vir jou eintlik sê dat dit hulle meer gaan help nie. Jy het maar sekere goed wat jy met al die kinders gaan doen in elk geval wat op daai kontinuum lê.. Jy gaan dit op almal doen, want dit is mos nie 'n, uhm, dis mos 'n kontinuum, so jy het jou erge ene en

jy het jou een wat bietjie minder erg is, so op die einde van die dag gaan jy selfs jou stout kind amper half so kan hanteer.....soos 'n aandagafleibare kind.

Ek het in 'n paar navorsingsstukke wat ek gelees het gesien daar was by mense se gevolgtrekkings gesê dat hulle voel as dit in die grondslagfase die hele klas half hanteer word asof almal ADHD is, met ander woorde as hulle almal daai riglyne toepas op die klas gaan dit vir die hele klas eintlik tot voordeel wees. Sal Mevrouw saamstem met dit?

Respondent: Jy kan dit doen, deifnitief, maar ek het 'n teorie van waar aandagafleibaarheid vandaan kom, so jy kan vir my later vra as jy wil. Ek sal jou sê waar ek dink dit vandaan kom.

Sê maar vir ons?

Respondent: Weet jy, my tesis het gegaan oor die houding van kinders, ek kan nie mooi onthou nie, maar dit kom daarop neer dat jou goeie lesers.... Wat beïnvloed hulle om goeie lesers te word? En ek dink, ons kinders wat so baie TV kyk, jy deel nooit jou visie en jou gehoor nie, jy doen alles saam. So met ander woorde nou hoor hy hier ietsie, persepsieel ontwikkel hy nie apart nie. Hy ontwikkel sy visuele persepsie en sy ouditiewe persepsie word nooit gedeel nie. So ek voel as jy daai kind net van kleintyd af kan help om net na stories te luister, ons het almal na stories op die radio geluister, of ons het almal strokiesprente gekyk toe ons klein was. En dit voel net vir my asof daar nooit daai twee persepsiële bakens ...word nooit meer geskei nie.

Het u dit so geskryf in u

Respondent: Nee, ek het dit net terwyl ek dit besef het.....het ek besef, hoor hierso, hierdie kindertjies, kyk, wat ek agtergekome het ook is dat jou kindjie, waar die pappa en mamma vir die kind storie vertel al kan hy nie lees nie, het ook daai kind gemotiveer om te lees, dit het nie net gegaan oor vir hom te sit en lees nie. Daar was nie 'n verskil nie.

So wat van die biologiese oorsprong van aandagafleibaarheid?

Respondent: Ag weet jy ek dink ons maak te veel daarvan. Jy weet kinders het pak gekry en stilgesit. Hulle is geleer om stil te sit. En nou moet ons hulle verskree. Dit raak naderhand so algemene ding om te skree dat jy luisternou maar rêrig. Dis is vir my of dit bietjie te vinnig... Want kyk jy het nie regtig 'n toets daarvoor nie. Dit gaan maar op die DC4, jy moet daar kyk. Dit is maar al. Dis maklik. Daar is nie 'n toets nie. Jy kan hom nie 'n fisiese toets gee nie. Hulle se daar is bietjie brainskans wat goed uitwys, maar al ons kinders word nie 'n brainskans gedoen nie, so jy kan nie altyd 100% se dit is daar is nou rerig 'n ding wat jy kon voorkom nie, met 'n biologiese manier kan vasvat nie.

Beskou die Departement ADHD as 'n ADHD as a leerhindernis?

Respondent: Yes, hulle doen definitief Yes.

So as ons kyk na daai twee dokumente, daai Education White Paper en the Guideline for Inclusive Learning – Hulle noem nie spesifiek ADHD nie, maar sien hulle dit dalk....

Respondent: Onthou nou net, jou groot ding is as jy jou kinders identifiseer van klein tyd af of van die vroeë grade af, dan begin jy konsessies vir hulle gee. Nou, die konsessie wat jy vir hulle gee vir ADHD is òf hulle kry meer rus, òf hulle kan eenkant toe skuif, jy kry konsessies, en dit kan deur gaan tot Graad 12. So dis hoekom ek sê jy het definitief. Maar dan moet daai kind geïdentifiseer word; ek het 'n bekommernis dat ons nie genoeg kundiges het wat dit reg diagnoseer nie of die regte medikasie voorskryf nie. Dit pla my op die oomblik. Want dit is 'n speletjie. Of die kind sit hier en lyk of hy heeltemal uit is, en hy is heeltemal 'n zombie, of dit lyk asof dit glad nie werk nie, en die pilletjie moet maar net kort-kort gegee word. Ek het nou die dag 'n kind hier getoets wat ek twee Jaar terug getoets het met IK, wat 'n geweldige verskil gehad het tussen sy twee tellings met en sonder Ritalin, daar kon ek nou sien dit het gewerk.

U kon sien die Ritalin het gewerk.

Respondent: Maar die departement het sekere konsessies en hulle noem dit baie pertinent in al hulle dokumente, dat so kind dan meer breke tussen-in gaan kry, of hy gaan ekstra tyd kry, of hy word heeltemal eenkant geskuif.

Maar dink u hulle doen dit?

Respondent: Ek het dit toe vir hulle gegee. Ek het drie-en-dertig kinders verlede Jaar gedoen. Matriek. In die Lejweleputswa Distrik. En ek het een kind oorgestuur na CUT toe met sy dokumente. En sover ek weet, maar dit was nou nie vir ADHD nie, maar vir disleksie, het hulle dit vir hom toegestaan.

So dit is toelaatbaar tot in Graad.....?

Respondent: Graad 12. Van graad 1 af tot graad 12. Dit is nie die eerste Jaar nie. Ek dink in die vorige Jaar was dit in die twintig, maar verlede Jaar weet ek was daar drie en dertig kinders wat ons getoets het. Ons moes dit aanbeveel dan gaan dit na provinsiaal toe. Dan sit provinsiaal saam. Hulle moet besluit want hulle moet kyk na al die dokumente. Jy weet jy kan jou mediese sertifikate gee, jou sielkundige psigometriste, jou arbeidsterapeute, almal se goedjies wat daar ingekom het, word dan aangeheg aan die aansoek, daar is 'n spesifieke aansoekvorm. Ek dink hier by Augustusmaand moet alles in wees.

Dit is interessant, maar dan moet die kind formeel geëvalueer word.

Respondent: En dit is die probleem, die onderwyser moet dit so kan erken dat hulle kan vir die ouers gaan se, hoor hier, gaan sien Daar word baie so gedoen. Daar word regtig baie in die skole gedoen. Die onderwysers doen dit verskriklik baie.... soveel so dat die kinderleidingkliniek nie kan voorbly om daai kinders te kan getoets het nie. Nee regtig, daar was baie. Daar was stapels verwysings. Die druk is te groot dat hulle dit kon almal doen. Al wat moet gebeur as hulle vir jou 'n verwysing stuur met 'n verslag, dan word daar weer deur die District Based Support Team... word daar gesit en besluit of hierdie konsessie toegestaan

kan word of nie. Op Graad 12 vlak, maar voor dit kan dit in die skool situasie toegestaan word.....wat dan die School Based Support Team genoem word.

Maar die konsessie het te doen met Inclusive Learning, special needs – of is dit spesifiek met ADHD of met allerhande leerprobleme?

Respondent: Met alle leerprobleme. Dit gaan nou maar ADHD wees, dit gaan disleksie wees, dit gaan swak oë wees, dit gaan fisiese gebreke wees, absoluut alles.

Ek wil net vir interessantheid weet, in hierdie twee dokumente wat ek deurgegaan het, het ek nie ADHD spesifieke gesien nie. Is daar 'n ander dokumente wat ek kan ?

Respondent: Yes ek dink daar moet wees, ek het dit nou ongelukkig in my kantoor.

Dis als reg. Ek kan Mevrou later bel.

Respondent: Ek kom die 15e terug en dan beplan ek om daai goed wat daar anderkant is hiernatoe oor te trek, want ek het nie eintlik rêrig 'n groot spasie daar nie. Dan moet eers die goed hiernatoe bring. Dan kan ek vir jou wys.

Kan ek Mevrou die 15e skakel om te hoor van dit?

Respondent: Kom ons maak dit die 16e. Dis dan die Vrydag.

Dit sal baie gaaf wees, baie dankie.

Dan....Hoe moet onderwysers leerders met ADHD hanteer? As hulle vermoed 'n kind het ADHD en dan ook as hulle weet 'n kind het ADHD?

Respondent: Daar is baie teoreë wat sê as jy die kind op 'n.... maar ek sien ons dink al hierdie goedjies soos balle, ek dink ek het hom nou weggevat, daai groot balle, hulle sê as die kind op hom sit, dan moet hy meer konsentreer om sy balans te hou. Oorsee en ouens

wat nou regtig met die kinders werk, het 'n platter balletjie wat nou dieselfde effek het, dan is dit nou nie so opvallend dat die kind op so bal sit nie. Maar dit kan nou weer 'n grap wees, dan is hy af van die bal, en dan is hy op die bal en so kan dit aangaan. Maar dit is een van die metodes om hom net te balanseer. Wil jy nou weet of hulle weet, en of die departement weet hoe om dit te doen?

Die onderwysers in die klas, as hulle vermoed die kind het ADHD, wat moet hulle dan doen?

Respondent: Hulle moet hom onmiddellik verwys na die kinderleidingklinik toe of na 'n dokter toe. Die kinderleidingklinik se naam is eintlik Onderwyhulpsentrum / Education Support Centre. So hulle kan hom verwys. En dan, daar sit ons ook eintlik met 'n probleem want jou kind wat 'n mediese fonds het kan gehelp word. Maar jou kind wat nou na (Name of Hospital) of daai plekke toe gaan kan nie noodwendig die medikasie kry wat hy nodig het nie. So die heel eerste ding is ons moet besluit het daai kind regtig so erge probleem, dat dit medikasie regverdig. En dan moet dit natuurlik gemonitor word, want jy kry mos al drie, jy kry mos Ritalin, Concerta en Stratera. En jy moet dan kyk watter een werk. Die groot ding is daai kind kan jy nooit in 'n bondel neem nie. Hy moet altyd half aan die een kant sit. Jy weet jy moet hom nie agter sit nie, jy moet hom voor sit, en jy moet hom aan die kant sit. Dit is die belangrikste wat jy kan doen.

Die plasing in die klas is belangrik.

Respondent: Die plasing in die klas is baie belangrik.

So hy moet voor sit en aan die kant dat hy nie die ander kinders kan pla nie.

Respondent: Dat hy nie die ander kinders se aandag kan aflei nie. Want hulle is geduring in die bondel besig om ander kinders te ontwrig. Die feit dat hy nie so lank kan konsentreer nie, beteken dat hy ook vir hom moet brekies gee. As hy regtig voel of hy te veel energie het kan jy hom bietjie laat buite speel. Se vir hom hardloop net 'n slag om die baan en kom

terug en drink water dat hy net van dit kan ontslae raak. Maar sover weet ek die beste oplossing is maar die medikasie. Weet jy hoe voel 'n kind wat ADHD het?

My kind het ADHD

Respondent: Maar weet jy hoe voel hy regtig?

Ek het al gelees oor dit, maar....

Respondent: Hulle se hy voel soos iemand wat in 'n verkeerde bed opstaan. Of in 'n ander nuwe bed opstaan. En die oomblik wat hy opstaan is hy gedisorienteerd. Hy weet nie watter kant toe nie. Jy weet mos as jy dink jy is in jou eie bed en jy dan opstaan. So hulle sê dis hoe so kind voel. En die medikasie help dat die PH van daai afskeiding bietjie geblokkeer word.

Jy weet in die klasse se hulle dat dan is daar n deur oop, en daar loop kinders verby, en hulle sien goed deur die venster en sien goed teen die mure en hulle weet nie op wat moet hulle fokus nie.

Respondent: Dit sal interessant wees as jy vir ons kan oefening gee waar jy dit heeltemal skei, dat hy net bietjie motories luister waar hy glad nie skuif nie, en geluide en klanke, en goed begin identifiseer. Kyk as jy vir hom daai persepsiële oefeninge gee, ek weet nie hoe oud is hy al nie.

Hy is nege.

Respondent: Yes, hy kan dalk bietjie baat daarby. En dan ook baie visuele diskriminasie goed dat hy kan goedjies vir jou kan uitkyk dat hy verskille kan sien, en puzzles en sulke goed bymekaar sit sonder musiek, sonder lawaai om hom, dat hy net daai twee apart gebruik. Kyk of dit nie sal help nie.

Dit sal die ander kinders ook so bietjie kan help as jy dit kan versterk. Jy kan eintlik deur die ADHD kind te help... sluit jy eintlik almal in. Jy hoef nou nie spesiaal net aan die kind aandag te gee nie. Want dit is eintlik waarom die hele studie gaan. Deur dit te inkorporeer sonder dat die ander.... Hoe kan jy jou teaching verryk, ekskuus ek praat so deurmekaar, maar hoe kan jy jou teaching verryk en dan help jy sommer die ADHD kind ook.

Respondent: Dis reg Yes, weet jy, ek het 'n manier om 'n fokus punt in te stel. Ek sal jou netnou wys. Want as jy dit vir 'n kind kan leer en hy stap deur sy eerste klaskamer en jy kan dit met al die kinders in die klas doen, en nie net hy nie, dan het jy dadelik 'n klomp kinders se aandag.

Dink u dat die ontwrigtende gedrag van die ADHD-leerder die onderwyser se houding teenoor so 'n leerder kan beïnvloed?

Respondent: Jong Yes dit sal seker, want ek meen sy gaan ook later begin voel sy kan nie heeltemal net heeldyd op hom fokus nie, dit kan wees. Maar nou wil ek ook vir jou se dit is nie die enigste kind wat haar gaan ontwrig nie. So sy gaan met daai veertig wat daar voor haar sit seker minstens tien hê wat dit gaan doen, verstaan. Ek weet vir 'n feit die onderwysers sal byvoorbeeld vir my se ek het nou 'n kindjie wat na my toe kom wat rereg al half uitgeskuif het en ek het net toevallig die dag in die klas ingestap en gesien hy sit nie by die ander nie en toe het hy hom vererg en besluit hy gaan nie saamwerk nie. Ek het met daai kind begin werk en ek het al hierdie mooi eienskappe begin raaksien en met hulle begin praat daaroor en hulle het dit toe ook begin raaksien. Die kind sit nou heerlijk en werk, dit is nie nou meer 'n probleem nie. Dit was amper half of hulle hom verloor het omdat hulle toe al besluit het met hierdie kind kan hulle nie werk nie. Nou kry ek ook terug voer en dan se die mamma vir my hoor hier, juffrou sê daar was vandag nou weer verskriklike probleme met die klas, en sy het nou juis gedink daai oggend gaan dit nou so goed gaan. Nou het hy weer heeltemal weer uitgelash en goed gedoen wat hy nie moes nie. Maar nou het die onderwyser darem nou periodes gehad waar sy gesien het hoe hy kan optree as hy wel op sy medikasie is. So, sy was nie negatief teenoor hom nie, sy het net vir my gesê sê asb net vir die mamma dis beter as hy sy Ritalin gebruik.

Ek kan dink wat u sê. Dit maak hulle maar moedeloos. Nie net die ADHD kind nie, al die mammas. So as jy nog 'n ADHD kind ook het, hulle is juis so woelig op daardie ouderdom, dan is dit seker 'n bietjie erger vir U. Weet u wat is vir my vreeslik om te dink, al hierdie massas kindertjies – hulle val deur die krake.....Ek dink dit hang baie van die onderwysers ook af, want as ek nou vat met my kind – hy het glad nie die hiperaktiwiteit so erg nie, hy fiddle vreeslik. Hy kan glad nie stilsit nie. Hy sal met sy voetjies fiddle, en met die pen en so. En hy dagdroom vreeslik, so hy verloor fokus. En toe het ek ook die een slag met die juffrou gaan praat, toe sê sy sy gaan nie soos 'n polisieman agter hom staan nie, hy moet sy werk doen. En hy het nie altyd beheer oor dit nie.

n Swart ouer kan dit nie eers half identifiseer nie, hy sien dit net aanstap. Mens wonder nou, daai swart onderwysers, of die hoofde dit wat U vir hulle leer, of hulle regtig die moeite doendis wat mens wil uitvind. Doen hulle moeite om daardie onderwysers te bemagtig, want dit sal so help met al die kinders?

Respondent: Weet jy wat dink ek is die groot problem? Daar is nou al so baie geïdentifiseer, die hoofde is nou al bang dit raak 'n mode. Hulle wil nou nie meer die goed vir jou uitwys as dit nie so erg is nie, want daar is te veel. Dit is genuine so. Dit is regtig so baie wat sê dat hulle ADHD het dat ek ook nou al self begin wonder het of is die goed 100% mooi onder beheer.

Maar ek voel 'n kind moet glad nie weet dat hulle dit het nie, want hulle kan dit maklik as 'n verskoning gebruik.

Respondent: Yes hulle kan dit as 'n verskoning gebruik.

Manupileer

Respondent: Wat het jou nou laat dink jou kind het dit gehad?

My kind se onderwyseres in graad R het vir my gesê sy vermoed, nee hy was by (naam)... en ons moes hom laat toets.

Respondent: So dit was net die dagdrome, net die ADD nie die ADHD nie?

Yes, hy het nie die hiperaktiwiteit nie, hy het die wat hy nie kan konsentreer nie, hy het effens hiperaktiwiteit, maar nie so dat dit disruptive is nie. So sy hiperaktiwiteit is so, hy kan nie stilsit nie, maar hy staan nie in die klas op en steur die disipline en so nie.....Yes want onthou ADHD het ook deur 'n fase gegaan waar almal gese het hulle voel dit word geordiagnoseer.

Respondent: Ek wil net seker maak dit is wat ek ook sou gese het, jy weet. Maar nou wonder ek wat drink hy nou. Drink hy Ritalin?

Nee, ons het hom by Dr (naam) gehad en hy het hom op Ritalin gesit, maar hy was vir my soos 'n zombie. En dit was net nie my kind nie. Toe voel ek nee, dit is te sterk.

Respondent: So jy gee dit nie vir hom nie.

Nee. Toe het ons hom sSratera gesit, en dit het nie regtig 'n uitwerking op hom gehad nie. Nou het ons hom op Concerta, en die juffrou in die klas het gese sy kan sien – dit is al van verlede Jaar af – hulle kan sien dat hy beter konsentreer en dit verander nie sy persoonlikheid nie.

Respondent: O, dit verander darem nie sy persoonlikheid nie. Hoe lank hou dit? Hoe lank voel sy voor dit uitwerk?

Nee, dit is langerwerkend. Hy's baie soos...

Respondent: As jy naweke nie vir hom gee nie, wat gebeur dan?

Nee dan is hy aan die gang!

Respondent: Hardloop hy rond?

As hy sit en TV kyk, dan lyk dit of hy hierdie bank klim. Dan is hy hier, dan hier, dan
(Lag).

Respondent: So hy het bietjie hiperaktiwiteit by?

Yes, maar nou moet ek ook se, die dokter het vir my gese omdat ons met hom baie streng is by die huis ook, kan dit dalk wees, dat hy hom probeer beheer in die klas, en dit is hoekom hy nou met die voetjies sal skop en fiddle met die pen en so. Maar dissipline is ook maar deel van daardie behavioural therapy.

Watter ondersteuningsisteme is in plek by die Departement om onderwysers te help met hierdie kinders?

Respondent: In die eerste plek, dit is nou maar algemeen, ons gaan nou nie net op een ding kan fokus in die onderwysstelsel nie, in die algemeen was dit veronderstel om elke skool 'n Site-based Support Team te he. 'n Site-based Support Team bestaan gewoonlik uit ten minste vyf lede van die skool. En waarvan twee of drie van hulle uit die Senoir Management Team kom, met ander woorde, hulle is veronderstel om so bietjie meer krag te he as hulle iets sê. Maar dan mag hulle kundiges vra om vir spesifieke, dit is die ideal, gevalle in te kom, byvoorbeeld as jy nou gaan sit met daai ADHD kind, en jy weet nou nie wat is die plan wat jy vir hierdie kind moet voorstel nie, dan kan jy jou mediese dokter vra of hy nie daai spesifieke vir daardie dag wil inkom nie. So jy kan jou kundiges aan die buitekant betrek. Dit gebeur nie in die praktyk somer nie, want die programme is altyd baie vol. Van daar af word die kindjie dan gehelp in die skool soos wat hulle in daardie span nou beplan het. Ons het nou 'n ding wat ons noem 'n Screening Identification Assesment and Support, wat 'n file is in SA Sands, 'n program wat al die skole gebruik, so in daai program is daar plek vir hierdie tipe gevalle. Elke kind se hele profiel word daarop ingesit en beskryf. So as hy na 'n volgende skool toe gaan, dan kan daardie hele profiel net so oorgaan.

Dit is baie belangrik.

Respondent: Yes, en daarin kan jy nou, as jy jou inligting het van jou mediese dokter, dan skryf jy dit nou vir jou kind daarin. Dan kan jou skool klaar al doen wat hy moet doen, want hy het klaar 'n plan uitgewerk. En dit word nou in daai SIAS gestoor, en in die kind se leerdersprofiel. En daai leerderprofiel gaan ook saam met hom van skool tot skool. In die ou Yesre het was dit net blanke skole. So dit gaan oor soontoe en hulle behoort dan te sien dit was die planne wat hulle vir daai kind gehad het.

So word daai kind dan aparte klassies geëvalueer?

Respondent: Kyk, dit is ook maar 'n ding wat net die Vrystaat op die oomblik nog doen. Of meeste van die ander mense het dit glad nie meer nie. Ons het nog remediërende klasse en ons het ook nog jou spesiale klasse, maar dit is net 'n inisiatief van die ou wat op die oomblik daar is, en hy baklei baie hard om dit te hou, want in Gauteng het dit al uitfaseer. Daar het jy nou weer spesiale skole, maar dan is dit van Graad 6, soos en nou op die oomblik hier. Maar jou ideaal was mos nou dat jou White Paper stick sou daai remediërende klasse vervang. Ons was gelukkig in die tyd wat ons daar was... het ons baie baklei en baie voorleggings gemaak en baie gesmeek dat hulle dit net nie moet wegvat nie, want die kind kan regtig dit nie maak in die klas as hy 'n agterstand het..... dit opmaak tussen al daai kinders nie. En ons het dit nogal reggekry dat ons dit nou weer onlangs heelwat nuwes kon krynuwe klassies kon kry. Maar as hy aandagafleibaar is gaan hy net daar land. Hy is eintlik net veronderstel om in die remediërende klasse te wees as hy agterstande het, as hy skolasties agtergeraak het.

So die kindertjies met ADHD wat goed doen?

Respondent: Hulle gaan nie uitgehaal word nie.

Maar Mevrouw het nou-nou gese dat daar wel werksinkels aangebied is om vir die onderwysers leiding te gee. So hulle behoort te weet hoe om dit in die klas te hanteer?

Respondent: Ek was sewe Jaar daar gewees, en in daai sewe Jaar was daar seker omtrent elke Jaar een of ander werksinkel wat jou learning disabilities insluit. En ADHD was ook ingesluit.

Sê vir my hierdie opleiding – hoe gereeld het dit plaasgevind met die hoofde?

Respondent: Die groot een was om hulle te leer hoe om hulle in die Inclusive situation te hanteer. *Differentiating Teaching Learning and Assessment* was die manual se naam. Dit was seker so twee Jaar gelede. Dit het ons 'n tyd geneem om deur al die skole te hardloop, dit het ons maklik 'n Jaar en 'n half gevat, maar voor dit het ons maar by geleentheid die Site-Based Support Teams opgelei en hulle is deur al hierdie goed ook opgelei. Die Site-Based Support Teams was die heel eerste fase en daarna was dit die hoofde met die SMT's en dan was die Site-Based Support Teams- koördineerders ook nog daar met die idee dat nou moet die hele skool gecascade word. En dit het nie orals gebeur nie. Van my skole en 'n paar van die ander ouens wat saam met my gewerk het, het ons wel die cascading gaan bywoon om te help, om te kyk dat dit wel reg gedoen word. So die groot ding dink ek maar wat gebeur het en hulle seker maar nie verwys na die ander skole nie, maar die groot ding is daar was sekere skole wat wel dit gedoen het, wat definitief dit gedoen het. Jou groot ding is net jou laerskole gryp dit nogal aan. Jou ou model C skole – definitief. Hulle weet. Hulle kan nie vir my se hulle weet nie. Want ek het hulle almal gehad. Hulle het regtig. Ek het hulle goed getrain.

Maar as ons kyk na daardie leerderprofiel. Sê nou ons het 'n situasie waar die ouer ingaan en sê – in Graad 1 – my kind is getoets, hy is deur al die prosesse, hy ly wel aan ADHD. Hierdie en hierdie en hierdie is die punte waarmee hy ... byvoorbeeld sukkel om te fokus. Hy kan rêrig nie stilsit nie en so. Moet hulle dan nie die verslae aanvra om in die kind se lêer te sit nie?

Respondent: Dit moet in almal se lêer wees. By die kinderleidingkliniek is daar 'n lêer vir elke kind. En elke kind wat enigiets mee gediagnoseer word. Of dit nou ADHD is of disleksie of

wat ook al – dit is eintlik veronderstel dat dit by die kinderleidingkliniek in elke kind se lêer gebêre word. Dit word gedoen, partykeer kry jy baie verwysingsvorme met hierdie goed aangeheg, dan staan daar net vir statistiek. Dan maak ons 'n file oop en hy kry 'n lêernommer en ons los dit daar. Nou presies wat in daai file is, was in sy Epla en dit bly daar in sy profiel. Daai profiel gaan van skool tot skool. As ek byvoorbeeld daar kom by Graad 10, kom ons sê by Wessel Maree, en ek vra waar is daai kind se leerderprofiel, bring dit vir my, dan gaan ek gewoonlik goed kry van sy laerskool af, (name). of (name) wat al daai goedjies van my nog in het. Ek kan selfs sien waar ek het getoets het en daar iemand anders is wat hom getoets het. Dan kry ek dit dadelik en dan kan ek verslag skryf en in Graad 12 wanneer jy daardie goed in plek moet hê, dan kan al daai ander verslae vir jou sê maar dit is vir my die rede hoekom ek sal sê die kind kan 'n konsessie kry, want toe ek nou daar was, moet ek my handtekening sit en sê dat hierdie kind 'n konsessie kan kry op grond van die feit dat hy in daardie Yesre gediagnoseer is en dat hy al die konsessies in die skole gekry het en dat dit vir hom gehelp het en dat hy weer hertoets is en sulke goed.

En as daar nou 'n geval is waar die kind heeltemal privaat getoets is en nie deur die kliniek gegaan het nie?

Respondent: Dit werk nog steeds. Jy kan enige verslag daar hê. Jou enige verslae – jou arbeidsterapeutverslag, jou sielkundige verslag, jou psigometriese verslag. Onthou, hulle kon deel gewees het van die Site-Based Support Team-spannetjie, en dit is juis op grond daarvan dat die kind nou verwys is. Maar net vir statistiekdoeleindes baie keer by die kliniek. Nie noodwendig vir toets nie. Omdat jy klaar daai inligting iewers gekry het.

Dit is nou interessant, want ek is byvoorbeeld een van daai mammas wat elke Jaar gaan en hulle het nog nooit vir my gevra vir 'n verslag nie. En ek bedoel as my kind nou in die hoërskool kom en ek wil aansoek doen vir daardie konsessie...

Respondent: Praat jy van (Name of school) skool? Want (Name of school) skool se goed is redelik op datum.

Dit is wat vir my snaaks is Yes.

Respondent: Hulle goed was nog altyd op datum, so as hulle dalk net nie geweet het dat jy enetjie het nie. Weet jy wat, jou kind is nou nege. Jou kindjie het wanneer daar aangekom? Verlede Jaar?

Nee, hy is nou Graad 4.

Respondent: Graad 4? Was hy daar toe tannie (naam)..... daar was? Tannie (naam).

Yes, sy is mos nou eers onlangs daar weg?

Respondent: Yes sy is onlangs eers weg. Weet jy sy was baie pertinent om daardie goedjies vir my bymekaar te sit. Daar was net vir my daarna nuwe ouens wat nog nie opgelei is nie.

Maar hy is akademies baie sterk.

Respondent: Maar dan sal hulle hom nie gevra het nie. Maar vat dit in elk geval dat hulle dit net in sy Epla bêre. Dat jy nie later van tyd as iemand vir jou se jy dalk gaan moet ekstra tyd kry, hulle gaan hom dalk net ekstra tyd gee as hulle dink dit is nodig. Onthou, jy kan hom nou nie overkill nie. Dit is wat ek ook al baie gevind het met baie van die outjies. Hulle kom na jou toe dan het hulle hierdie heavy konsessies met die kind wat nou kamma disleksie het, maar daardie kind kan self lees. Hy kan net nie spel nie.

Die ander ou kleintjies wat sukkel ...

Respondent: Nou sê ek vir hulle jy kan net..... Jy moet hom ook mos nog leer. So jy gaan nie vir hom dadelik alles lees nie, dat hy maar eers self skryf, nou se jy maar eers, okay, nou kan ons bietjie van die spelfoute oorsien, maar dit is nie wat toets nie, nie nou spelling nie. Jy wil die kennis toets. En nou gaan jy later van tyd..... gaan jy mos sien. Jy gee vir hom net wat hy nodig het om hom te ondersteun om te kom waar die ander is, maar nie overkill nie.

Nee vir seker. In Graad 1 en 2 was daar glad nie probleme nie. Graad 3 toe sien ek, kyk die juffrouens, ek moes vir hulle se dat hulle moet kwaai wees met hom. Graad 3 dan kom daar toetse huis toe, dan is die laaste vier vrae nie ingevul nie. En op hulle vlak is vier vragies baie. Dan sê hy maar hy het nie klaar gekry nie.

Respondent: Yes, hy het te veel gedroom.

Yes.

Respondent: Hulle behoort eintlik vir daardie kinders bietjie ekstra tyd te gee. Maar soos vyf minute. Ek het by een plek ingestap, toe kon daardie kinders skryf tot wanneer hulle klaar is. Toe was ek baie onsteld. Dit werk nie so nie. Vyf minute per uur of so is reg.

Ok, ons het net nou gepraat oor die werkstake wat hulle kry, maar weet Mevrou dalk of hulle formele opleiding.....die onderwyserskry hulle daar opleiding vir ADHD of is dit meer die werkstake wat hulle bywoon?

Respondent: Ek het klasgegee by Kovies vir die ACC studente in Ladybrand op 'n stadium. Toe het ek spesifiek daardie modules aangebied. Toe was daar in gewees. So ek weet nie waar dit nou lê nie, maar dit was daar.

Dink U onderwysers is genoegsaam opgelei om ADHD leerders te hanteer?

Respondent: Hulle is, maar hulle het nie die tyd nie. Ek dink nie hulle kan dit beheer in die klaskamer nie. Ek dink hulle weet. Baie van hulle weet al maak hulle of hulle nie weet nie. Want hulle wil dit nie altyd toepas nie.

En die klaskamers wat so groot is kan dalk 'n invloed hê.

Respondent: Dit is overcrowded en ek dink hulle het maar nie die tyd en lus nie. Want die periodes is kort. Jy moet deur die kurrikulum kom.

Al hierdie dinge – is almal presies met hulle goedjies vir U?

Respondent: Van hulle is. Ek dink net baie van hulle is maar net nie ordentlik ondersteun nie. Hulle sal dit doen as hulle ordentlik ondersteun word.

Hulle sal vir U sê hulle word nie ondersteun nie? En dink U by baie van die skole met die ADHD kinders spesifiek – Dink U daar is ouers wat nie betrokke is nie? Wat byvoorbeeld nie by die huis hulle deel doen nie?

Respondent: Yes, jy sal dit orals kry, want ouers is geskei, en hulle het net nie die tyd nie, en hulle kom laat in die middag by die huis..... daar is te veel druk op hulle, maar ek dink ook maar nie elke ouer help nie. Want jy gaan maar jou mammas en pappas kry wat definitief weet wat om te doen en ander gaan nie weet wat om te doen nie.

Wat is U behoeftes in hierdie verband? Is daar iets wat Mevrouw graag sal wil sien gebeur of voel U dit is heeltewel reg en aangespreek van die department se kant af?

Respondent: Nee ek dink die mannekrag op hierdie stadium is te min. Ek sou nou in elke liewe skool 'n spesiale klas wou gehad het. En in elke skool 'n remediërende klas. En hierdie kinders wat in die spesiale klas is - dié wat se IK minder/onder 80 – Dis is jou Orion-gevalle – hulle gaan nie verder as Graad 10 nie. En dan jou ander spesiale/ remediërende klas, ek sê altyd jou Reading and Writing – Jy gaan hulle nie herleer nie. Jy moet hulle basies leer waar hulle 'n probleem het, want jy het nie so baie tyd met hulle nie. Jy kan nie 'n kurrikulum met hulle deurwerk nie.

En in remediërende onderwys, is daar spesifiek vir as ons nou kyk na ADHDvir die kindertjies wat nou akademies nie sterk is nie?

Respondent: Yes, jou remediërende onderwys is vir jou kinders wat agtergeraak het. Jou spesiale klas is vir jou kinders wat byvoorbeeld nooit tot by matriek gaan kom nie. Ek het altyd vir myself so gesê.... by jou gespesialiseerde skool , jou spesiale klas, jou remediërende klas, het ek altyd vir myself gesê as jou kind net tot by Graad 3-vlak sal kan leer, is dit jou

gespesialiseerde skool soos Amari – as hy kan gaan tot omtrent Graad 9, maar nooit verder as dit nie, jy wil hom druk tot Graad 10, is dit jou spesiale klas, jou spesiale skool soos Orion. En remediërende klas, is daai kind wat eintlik kan, maar het agtergeraak. Dis hoe dit eintlik werk.

Ek het 'n studie gelees wat spesifiek gegaan het oor kinders wat in die hoërskool se punte vreeslik daal. En in die laerskool, veral in die grondslagfase het hulle baie goed gedoen. En toe het hulle daar in hulle samevatting gesê dat baie van die kinders 'n hoë IK het, akademies is hulle sterk, maar hulle het wel ADHD, so hulle sukkel om te fokus. En dan het hulle in die hoër standerds as die werkslading meer raak.... sukkel hulle om te leer, want hulle kan nie konsentreer nie. Wat is jou opinie rondom dit? Dink jy dit die geval kan wees?

Respondent: Dit kan wees, maar weet jy wat is die ander ding? Ek weet nie of jy weet nie, maar as jy byvoorbeeld 'n kind wat wiskunde druipt tot in Graad 8, en hy kan elke Jaar deurkom met die wiskunde wat hy gedruip het in Graad 8, maar hy kan nie in Graad 9 wiskunde druipt nie, so waar bou hy? Verstaan jy, so hy het eintlik nooit nodig gehad om vreeslik aandag te gee aan wiskunde wat eintlik 'n hengse konsentrasie is, jy kan bietjie jou konsentrasie oefen. Daar is oefeninge – konsentrasie-oefeninge wat jy kan doen, so hy het nooit nodig gehad nie, nou skielik nou dink hulle nou druipt almal, maar hy het geen grondslag gehad nie. So dit is die sisteem wat nie reg is nie. Nou sit ons met 'n bottelnek in Graad 9 met sestig, sewentig kinders partykeer wat in Graad nege is, waar hulle twintig moes wees. Nou kry jy daardie kind deur in Graad 9, dan het hy klaar weer nie 'n goeie grondslag vir sy wiskunde nie. En ons sukkel juis so met die kinders se wiskundegeletterdheid in eerder die plek van wiskunde. Die hele sisteem het verander.

Maar dinge gaan nog goed hier op Welkom. Dit gaan goed hier met die grondslagfase. Maar soos U sê die eks-model C skole. Wat noem hulle dit nou?

Respondent: Yes ons noem dit die eks- model C skole. Hulle gaan goed aan. Regtigwaar, ek het baie goue oulike onderwysers daar gehad wat die kinders kan help. En die hoofde stel

belang. Hulle sal jou bel en se asseblief Mevrou kom in. Ons het groot probleme, ons weet nie hoe om hierdie kind te hanteer nie. So hulle gee om.

Maar mens werk met 'n baie spesiale 'breed' as jy met grondslagfase-onderwysers werk. Jou kleuterskoolonderwysers wat met die kleintjies kan werk, hulle is nou regtig vir my spesiale mense, behalwe as jy nou iemand indruk wat nou regtig nie met 'n kleintjie kan werk nie. Jy het 'n spesiale soort mens nodig om met daai kleintjie te kan werk. Nie enige ou kan dit doen nie.

Respondent: Ek wil net dit ook sê, jy kry ook dat 'n kind by een onderwyser goed gaan doen en dieselfde Jaar by 'n ander onderwyser nie goed gaan doen nie. En daaroor het ek baie inligting oor hoekom dit gebeur. Hoe die kind se prosesse werk en hy pas nie by die onderwyser se proses aan nie. En baie keer leer ek vir daai kindertjies dan sê ek vir hulle maar dit is wat die probleem is, jy gaan nie verander nie, die juffrou gaan nie verander nie, maar kom, verstaan jy net jouself, dan kyk jy hoe werk jy met daai twee prosesse saam. Jy weet, ek het nou in die week 'n kind gehad wat van verlede Jaar tot hierdie Jaar 'n geweldige verskil in haar punte het. En onder andere, 80% vir die een vak het en vir die ekwivalente een skielik soos 50/40. Dan vra ek vir haar, is dit 'n onderwyseres wat skree, wat 'n harde stem het in die klas, dan kan ek duidelik sien die outjies wat bietjie sensitief is, kan nie daardie hoë toonhoogte van die onderwyser so lekker hanteer in die klassituasie nie. So nou moet jy haar maar sê, maar hoor hier juffrou gaan dit en dit, dis hoekom, dis hoekom dit met jou gebeur. Kom ons hanteer dit eers.

Dit is nie 'n persoonlike ding nie.

Respondent: Dit is nie 'n persoonlike ding nie, maar, en jy gaan dit altyd hê. Jy moet maar bietjie met haar werk daarop. Sodat sy dit kan hanteer. Party is maar net baie meer sensitief vir daai tipe van..... as 'n ander ou se persepsie nie by syne pas nie.

END OF FORMAL PART OF INTERVIEW

APPENDIX K

Transcribed Interview
School D (Private School)

Sound Clip 713

Introduction and general explanation of the purpose of the interview were given.

What is your understanding of Attention Deficit Hyperactivity Disorder?

Teacher 1: It is a child that battles to participate, not your normal, I won't say uhm, he is not abnormal, he can sit still and react to a lesson the same way as a normal, non-ADD, ADHD child. Problems focusing, paying attention

Teacher 2: They can't pay attention.

Okay and I think just adding to that, it's interesting enough that if you think of peoples' understanding of ADHD, most people will think that it's learners who battle academically..... Where if we look at research they've shown that only 20% of learners with ADHD battle academically, the rest of them are actually very intelligent. But as you say mostly with their focus and concentration that they have a problem.

How often are you faced with the challenge of managing these learners in your classroom? Are you made aware of the fact that the learner has ADHD by the parents? Do you suspect that the learner might suffer from ADHD?

Teacher 2: Doesn't challenge me at all. I've got children that are on Ritalin and I've got children that aren't. And I feel if you've got a child that got ADDH and you keep him occupied, it's just a lot of patience and love I think.

Ok. And do you get that like every year or

Teacher 2: Every year, Yes. It's become worse.

Teacher 3: Yes, it's become worse definitely over the years.

Teacher 1: Every single one here has got someone with ADHD.

Teacher 2: I've got two that's on medication. (Name...) has a child of her own that is on Ritalin and then Concerta.

Yes, shame and they battle. It's hard for them.

Are you made aware of the fact that the learner has ADHD by the parents mostly or do you suspect and then make the parents aware of it?

Teacher 1: O well you pick it up in the classroom, because they're restless. A lot of them, when I've first started teaching I couldn't understand why this child was rocking all the time, but not all of them do that.

Teacher 3: You see luckily for us as the grade 3 teachers, so like Rene or Debbie and them will discuss it with us and say look you know, so there is a lot of information from the previous teacher as well.

So you think, in your school it's more identified in the classroom?

Teacher 3: And you refer it to the occupational therapist and from there we work and if it doesn't improve, you get their.....what they observe and then work from there.

Teacher 4: So by the time they get to grade 3 they've been identified basically. And they are new children.

Teacher 1: And it is easier for us because our classrooms are smaller.

Smaller yes, it makes a difference, hey.

Teacher 2: A lot of them are very ancient in the medication.

Teacher 3: Yes you are right.

Then it is difficult.

Teacher 4: They will only put the child on medication if you're very luckily and they can actually see that by, for instance, June there is no improvement in the child's mark and that he is really struggling and falling behind. Then they will take the child to a doctor and get medication, but it is hard to get them there.

Teacher 2: I want to tell you about a child I have, one of our doctor's children. In preschool already they've told her that he was ADHD and she said he wasn't. And come to grade 1 they checked and homework. And within a week that she had him on Concerta and then she said I have

Yes, they have to...

Teacher 2: They have to actually be exposed to that child before they actually realise it. They are totally unaware of it.

But I think it's because at home the child is just playing and they don't really notice it.

Teacher 3: And then they come to grade 1 and there is structure. And they must sit still and concentrate for 30 minutes or 20 minutes at a time and then they can't cope with that.

Teacher 2: And that child is highly intelligent..... and he couldn't. She thought he couldn't, he even battled to read when he should be reading, because he just couldn't sit still or just concentrate on learning words.

Shame, hey.

Teacher 2: It is actually sad because the kids have so much potential and they can't actually use it, because they are being hampered by the fact that they can't sit still.

And they experience so much frustration.

Teacher 4: And other children tend to start disliking them because they are so irritating.

Yes they do.

Teacher 1: You know what is also amazing..... you can go into a supermarket and you can, if you know the signs..... you can pick it up immediately.

Yes, you can.

Teacher 2: Oh, I've done that at church already . . .

Talking very softly and laughter.

What is the most common behavioural disorders associated with ADHD that you encounter?

Learners fail to give close attention to details?

Teacher 2: Definitely, just wants to finish it quickly.

They have difficulty finishing tasks?

Teacher 3: Definitely

Difficult to organize their tasks?

Teacher 4: Organizing, yes. They can't organize their desk.

Has difficulty to focus their attention to a tasks?

Teacher 2: Yes

Easily distracted?

Teacher 4: Yes

Fidgets with their hands and feet?

Teacher 4: Yes, and their stationary.

Teacher 2: And everything else, Yes.

Are emotionally sensitive?

Teacher 4: Yes

They do not follow instructions immediately?

Teacher 3: Or not at all.

Has difficulty remaining seated?

Teacher 5: Absolutely

They talks continually and they will often interrupts the teacher?

Teacher 4:Yes

Blurts out answers before the teacher has finished the question?

Teacher 4: Yes, or their mother, for the fact.

Do not like homework or schoolwork that requires sustained mental effort?

Teacher 2: Yes.

Loses things which they would need for activities such asstationary pencils and books?

Teacher 4: Yes, and usually when you tell the mom for instance that one year with the parents, that I suspecedt the child may have ADDH, the mom says the child just gets bored. And I said but it's impossible the child cannot get bored, we have so much to do in a day, it is not out of boredom that the child does not complete the task or whatever, it is because the child cannot concentrate for that long and is simply not interested in doing whatever I am doing in class. They want to play or get up and go drink water and then go the toilet; it's like this cycle every day.

Yes. What influence do the above mentioned behaviours or disruptive behaviour have on the rest of the learners in the classroom?

Teacher 2: Very

Teacher 4: It is disruptive, distracting.

Teacher 1: Absolutely

Teacher 3: If you have a child trying to work and the ADD child or ADHD child is busy fiddling or getting up and down, shouting out. It is very disruptive, Yes.

Teacher 1: I think it also draws a lot of teacher time, doesn't it? You are busy focusing on that one trying to get them to sit down and focus and be prepared. Usually they spent half their time fiddling away.

How do you handle ADHD learners in your classroom?

Teacher 2: I sit them alone.

Teacher 3: That thing usually best. They have to sit alone at a desk. Uhm..... preferably in front, because if they sit at the back you tend to lose them. They must sit as close to your desk as possible and alone, there mustn't be anything near them that can distract them.

Teacher 4: If I see the child's getting restless, then I send....him, you know....out to go like say look for a pen or something, just to get them out of that situation and just to get a bit of fresh air and come back again.

Yep, that also helps.

Teacher 1: A simple little thing. I've also got some squeeze balls and things like that I give them to play with. They can still concentrate if their hands are busy, that tends to help.

Talking to each other...

Teacher 2:(Name).... I think it's that one conference and we gave him pipe cleaners. I used to give him the pipe cleaners that helped. But also a very intelligent child and he used to make all kinds of things with the pipe cleaners.

In between the activities or

Teacher 2: Yes.

Teacher 3: While you are explaining to them, to the class, so that they don't have to just sit and listen to what you're saying, because they can't. So you must keep them busy with something else.

Well that's good.

How do these disruptive behaviours affect your attitude and emotional feelings towards that learner?

Teacher 1: Ag I find it so sad, I don't sleep at night, because I worry, always think of how I..... what can I do, you know.

Teacher 2: You ask so many questions.

Laughter

Teacher 4: You get tired.

Teacher 2: Very tired, I feel it by the end of the term, like the last two weeks..... then I.... it really bugs someone .

Teacher 4: Because it really drains you. It feels like you start all over again the next day.

Teacher 2: Because it is like half....five classes actually. Talking very softly. He gives commentary the whole day as if at a football match.

And is he on medication?

Teacher 2: No

Not?

Teacher 3: It makes a huge difference; if they only would put them on medication. Because that calms them down and it helps them to focus, it makes a huge difference. If they are not on medication, you have to cope with that child every day. It drains you emotionally, physically, completely.

Teacher 1: And if a kid that is on medication and I still like to ...(sighs). Huge.....hard work.

But if you get a situation like that, have they experienced with different medication or are they just on one and

Teacher 1: O well, I know with this particular child he is back on Ritalin but they usually go to Concerta. Usually to about three different

And can you see from one day to another that today he didn't take his medication?

Teacher 4: Oh Yes

All agreeing.

Teacher 3: I've got a little girl in my class that's been on medication, I think since the beginning of this term, little(name of girl) and the one Friday she came to school and she was just sitting, like she used to and then she's up, then it's her hair, then it's her pencils and everything, but she is not concentrating and then I said to her, "Did you take your tablet this morning?". No. So I wrote a letter to her mom and she said now she ran out of tablets and the pharmacist just order it and blablabla So eventually the child only started to take

it again the next Tuesday, but you can immediately see if they haven't had it because they

All talking together.

Teacher 1: Also after break _____ *(All talking together).*

Teacher 2: You can see it in their eyes.

Teacher 1: The mom has to check their diet.

Teacher 3: But luckily our tuck shop made a change, they don't sell those cheap sweets anymore. They sell fruit and milk and water. And it makes a difference, especially with the ones that are hyperactive and that is not on medication.

Teacher 4: Sometimes the parents are very ignorant. Like with ...(name of child), his mother sent him to school with red bull and he is already

I can't believe it.

Teacher 4: He is in grade 7 already and his been with professor ...(name of professor) for years. They have all the brochures and booklets and the mother even asked ..(name of teacher), but I don't actually know if they read it.

That is one of the things that parents must realise, it's not the school's responsibility. You need to

Teacher 4: Give them guides, they should actually be packing the lunches, not our place to tell them you can't put this and this in your child's lunch box or give them tuck money every day.

Teacher 3: Some of the children come with tuck money every single day.

What support systems are in place at your school to help you to manage ADHD and associated disruptive behaviour in the classroom?

Teacher 3: Remedial classes and

Teacher 1: Three bottles of Calmettess

Teacher 3: And we've got an occupational therapist that comes here twice a week.

And does she then work with the learners only who are in the...uhm....with other ADHD learners as well?

Teacher 4: Look, we refer the children to the occupational therapist and..... uhm.... if there are ones that we've referred to (name of support teacher), she takes them out of our class for half an hour or whatever once a week and work with them. And most of them go to ...(Name of teacher) for remedial as well or they go to (Name of teacher).

Okay and then all your ADHD learners or only those who battle academically.

Teacher 1: Only the ones who battle academically. The others who cope ...

Teacher 4: Yes, I always run to... (Name of teacher) for advice.

Teacher 1: And also what we try and do is, as they get into a senior primary stage, you try to get them to be as independent as possible and whine them off the help. As they go to high school, there is very little support.

It is, hey.

Teacher 3: I think we support each other a lot. I mean, when I think about the otherteachers, I often go to (Name of teacher..) for help.

Teacher 2: With (Name of teacher...)as well, who is grade four and upwards, she does not stop with intensive remedial.

Oh that's great. So it is not just in the Foundation Phase, it carries on.

Did you receive training on management of ADHD learners during your formal training?

Teacher 1: No, I don't think I did.

Teacher 2: I did in Bloemfontein, I did a course.

But was that course after your official training?

Teacher 2: No it was during.

During.... okay.

Teacher 2: I think it depends on your training college. Mine was Bloemfontein and Professor (name of Professor) was there.

Ok, but was it like separate workshops that you attended or was it part of your

Teacher 2: No it was separate workshops. You actually had a choice.

Did you receive additional training or attended workshops through your school on management of ADHD learners?

Teacher 2: We have, you could attend courses, but it is only

Teacher 3: I went for a weekend with (Name...) I had a lot of children in my class that were battling and I was also battling. So I went.

Teacher 1: There have been a couple of different workshops.

Teacher 4: Yes, there have been a lot of workshops.

Talking to each other and together.

How were you made aware of these workshops? Do you go and search on your own or does the information get sent to the school?

Teacher 3: No

Teacher 4: They let us know, hey.

Teacher 1: It is not so bad anymore, that was pre 1999 fault.

Teacher 4: But the ones, if there is a workshop nowadays, they let the school know and then

Teacher 1: It usually comes from the high school I think.

Okay and if you guys then attend these workshops, is it for your own, do you pay for it yourself or does the school

Teacher 1: The school.

Okay, so you do get support on that.

Teacher 1: But that time..... many of us couldn't go.

Teacher 3: Yes.

Teacher 1: Only two could go.

Teacher 4: Yes, I mean you must understand, it's expensive as well.

Yes it is, it is.

Teacher 4: And not everybody is always willing to go either, that is another story.

Its always over a weekend or holiday.

Teacher 4: Yes so, especially weekends, but then the school does try I mean, we've covered quite a few things to say the truth.

Do you feel that you are adequately trained to manage these learners successfully?

Teacher 4: I don't think a person can ever know enough.

Teacher 1: Do you feel you are as a mother?

I must, honestly say, uhm..... during my teacher's training? No, only after I've been doing research on it now, yes, because now we treat it totally different. But before that, no and I think even parents must attend workshops.

Teacher 3: Definitely

Teacher 4: That's where it starts, if we can only get workshops for the parents, it would help a lot.

Teacher 2: There are workshops in Johannesburg . But you can also be a member of it, then you get up to dateAll talking together. You get Autism South Africa as well.

Teacher 3: We've done the Autism workshop. They keep sending you letters on it.

Teacher 2: The lady that does the workshop,(Name) went to her, at the preschool, she also....uhm...ag.... Darn! I can't think of it

Teacher 4: We did a course there once about a Brillbook, IQ Kids

Teacher 2: No.

Teacher 1: Our Future Kids

Teacher 2: No, not Future Kids. Wait, I will

Talking to each other.

Teacher 3: Yes (Name...) used to go with me. She also did a course, which was quite an eye opener.

Teacher 2: I can't think of it now.

For teachers or for parents?

Teacher 3: No, they did it especially at the preschool. Like you can go every Tuesday, more like a therapy session.

Teacher 2: Ag darn, I can't think of her name, preschool Also like an occupational therapist, but not (Name).

Is it not (Name)?

Teacher 2: No, ag darn!

Teacher: Yes you can think of children there like now, this (Name of girl) girl.....used to go like on a Tuesday or so for half an hour for like therapy and

Teacher 2: Yes, the preschool, they used the preschool.

Teacher 1: Ah, it is good to know. Why aren't they doing it now?

Teacher 4: (Name of therapist...) isn't it?

Oh, (Name)?

Teacher 1: She's come to speak here once.

Teacher 4: But teachers can always benefit from workshops about ADD and autism.... whatever, doesn't matter how often, even if it is once a year. Yes, just to... so we can catch up, because we don't always get to the same things that other people do. Like there are only two of us that can go to a certain workshop for instance at a time. So if there can be a general workshop for teachers.....It would be fabulous.

What are your needs in this regard?

Teacher 2: Calmettes

All laughing.

If you think of, now, workshops, would you like more sort of introductory into ADHD or specifically how to cope with it in your classroom?

Teacher 2: How to cope with it in your classroom.

Teacher 4: Coping methods would be fabulous, Yes.

Teacher 3: And managing it

Teacher 1: More teacher oriented, because most of it is more for the parents I feel, than for teachers.

Teacher 2: Ideas, you know, what to do with the children.

Teacher 3: We're lucky because we only have 20 or 21 kids in a class. The teachers at (Name of school) sit with 40 pupils in grade 1 and I don't know how they manage. They got a system in the beginning of the year, but still I do not know how you manage a grade 1 class of 40 pupils. How many of them got ADD and ADHD which is hyperactivity? And then for that poor teacher to cope, I don't know, honestly.

But do you think just for interesting, uhm, there's different opinions obviously, but if teachers.... that feel you, there is certain techniques you use to manage ADHD learners without the rest of the learners even noticing and if you can in the Foundation Phase sort of apply that to your whole class then you would get better results, because all of them would focus and concentrate better? Do you think that can work or do you think it would take too much of your time and you won't be able to cope with your syllabus?

Teacher 3: When I went on that workshop, they said we should use like that velvet for example and then they must write..... do this thing like on this velvet and it is easier then they can rub it out.....instead of rubbing it out, because that is mos one of the things that they don't like to do. Because once they have done it it is a permanent type of thing. Or you must make those cube things and then you spell words out and it is fun activities for the whole class. And I've tried it, but you can't cope in your class, because there is too much to do, there's just

And then the other children that spell words like better than a grade 6 and I mean.... then they sit with this thing, it's terrible. The levels are too broad, if I can say that, because you get these very clever children, then you get some that are okay, that need help, but don't need help that much, you know what I am saying? So I think for one person to try and cope even if you only got 10 children is very difficult. You can't put it in the

amount of things that you actually have to do in a day. Then it takes some of the work away and to do that all day, then the other children are going to start to get bored.

Teacher 4: Then you sit with the problem that they are getting naughty and they are up to mischief. That's why the remedial class it's difficult, the workload.

Teacher 3: In Grade 1 it will take the whole morning to play with blocks and velvet, I promise you. We won't get through half our syllabus if we have to do that. I think for small groups maybe if you do that after school and you've got like 3 or 4 children with a problem and you take them and you try and teach them by using those methods for instance now or whatever That would work fabulously, but you have to do it after hours, you won't be able to do it in class or everybody will fall behind. I don't think it is practical for actual teaching in classes.

END OF FORMAL PART OF INTERVIEW