

**Teachers Perceptions of Attention Difficulties with Reference to Learner
Identification and OT Referral. A Case Study of Six Foundation Phase
Teachers across Four Cape Town Primary Schools**

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A [minor] dissertation submitted in [*partial*] fulfillment of the requirements for the
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COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

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ABSTRACT

Attention is a skill that is vital for learning to occur in the classroom where many competing factors may impede a learners' ability to pay attention. Moreover, the classroom environment has different role players and factors that impact the quality of teaching and learning that takes place. These include the teacher, other learners, the school, and other support structures such as an occupational therapist. Attention deficit and hyperactivity disorder [ADHD] is a common, catch-all label used with learners who do not sit still or struggle to complete tasks independently, to name but a few observations done in classrooms by occupational therapist. Yet, a learners' learning and engagement is greatly impacted on by the teacher who acts as a mediator in the classroom. This research uses a qualitative research design to unpack the teachers' perceptions of these attention difficulties in the classroom. Particular focus was placed on how teachers identify these learners and the support structures in place to assist these identified learners. Through interviews conducted, six Grade 1 teachers were investigated and explored in order to gain a deeper understanding of these attention difficulties in the classroom as perceived by the teachers, and the support thereof. This research demonstrates that many of the teachers showed an understanding of the perceived attention difficulties that went beyond surface level. Furthermore, all the participating teachers have experience with attention difficulties and rely on their experiences rather than theoretical knowledge in order to help identify and support these learners. Overall, many of the teachers feel alone in supporting the learners as the home environments do not always play a helpful role within the learners' daily lives. Finally, support provided by on-site occupational therapist was found to be more beneficial for the teachers. However, there are still challenges experienced by teachers in managing big class sizes and covering the curriculum. It

is recommended that further research is conducted on the role of an Occupational Therapist in the classroom. In addition to this, teachers require additional training around attention difficulties as a means of providing appropriate support in the classroom.

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LIST OF ABBREVIATIONS

ADHD	Attention Deficit Hyperactivity Disorder
CHAT	Cultural- Historical Activity Theory
DoE	Department of Education
OT	Occupational Therapy
SBST	School Based Support Team
SDG	Sustainable Development Goal
SIAS	Screening, Identification, Assessment and Support
UCT	University of Cape Town
WCED	Western Cape Department of Education

CHAPTER 1

1.1. Introduction

The South African education system is in a state of restoration. The present-day education system is a result of the education system under Apartheid (Donohue & Bornman, 2018). Christie (1998, p.1) also addresses the South African education system as “a prominent and problematic legacy of apartheid education” in much of her research– insinuating the lack of organisation and functioning within the schooling system. In 1996, the *South African Schools Act 84 of 1996* was drafted which led to the development of *White Paper 6 on Special Needs Education: Building on Inclusive Education and Training Systems* of 2001, and four years later, to *Curriculum 2005* (Christie, 2010). These policies brought particular changes and conflicts into the evolving education system transformation. Thus, one of the goals of equality in education, and a source of debate, was a focus on inclusion, or inclusive education.

Booth (2005) refers to inclusion as a philosophy that is based upon principles that aim to maximise the contribution and participation of all members of society with the removal of discriminative practices. It is further described as the changing of policies, values and attitudes within a setting (Department of Education, 2001; Polat, 2011). White Paper 6 further elaborated on inclusive education to be the acknowledgement of learning and support for all youth and being accepting of differences (Department of Education, 2001). In an attempt to provide support to all learners in need, both within special schools and mainstream schools, the Department of Education developed a plan to take support to the learner and empower the teacher as a key role player (Department of Education, 2001). This was in the form of the Inclusive Education

Team which I currently form part of in the role of an occupational therapist and much of where my experience comes from.

In this context, the present research study speaks to the quality of education provided to learners in four public primary schools based in the Western Cape, and the kinds of support provided, or not provided, to teachers in mainstream classrooms who are having to deal with learners with behavioural and learning problems. This falls in line with the United Nations 2030 Agenda for Sustainable Development from 2015 (UNESCO, 2015). One of the seventeen goals includes Quality Education, also known as Sustainable Development Goal 4 (SDG 4) which is to ensure education that is inclusive and equitable and to afford opportunities to all for lifelong learning (UNESCO, 2015).

This research is informed theoretically by two main Vygotskian ideas. Firstly, Vygotsky himself found that children develop cognitively through interaction with other people in their environment, and not in isolation (Vygotsky, 1978, as cited in Gredler & Shields, 2008). Vygotskian research highlights the vital role of the teacher in the classroom and their ability to facilitate learners' interaction with each other and with the teacher within the classroom environment in the learning process. Secondly, Vygotsky found the development of executive functioning skills to occur mainly between the ages of two and six years, and subsequent research has found this developmental phase to provide an opportunity for a teacher to provide scaffolding and support, while at the same time nurturing these executive functioning skills (Zelazo, Blair, & Willoughby, 2016).

This chapter aims to provide a background to the current research study, and the process of developing the research question. The process of contextualising the

research problem and conducting a literature review led to the introduction of the theoretical framework informing the research, including the aims, the rationale for the research design, and methodology, which will be discussed in greater detail in subsequent chapters. This chapter concludes by presenting the main research question, and the specific research sub-questions to be addressed.

1.2. Outline Of Research Problem

In 2014, the Department of Basic Education introduced the Screening, Identifying, Assessment and Support (SIAS) policy in all schools in South Africa. It was developed from the *White Paper 6 on Special Needs Education: Building on Inclusive Education and Training Systems* of 2001. The 2014 policy document outlines a framework for providing learners, including those with 'disabilities' and those who experience barriers to learning, their basic right to education and access to the necessary support in their schools, which are largely mainstream and not special schools. Furthermore, the policy outlines new roles and responsibilities for those involved in educational support for teachers and learners in mainstream schools and from different sectors of education. This support system acknowledges the central role of teachers and parents in the decision-making and support processes of education (Department of Basic Education, 2014).

The SIAS policy speaks to the inclusion of learners in the mainstream and aims to provide the support that each learner needs to access quality education within a mainstream classroom. Vygotsky (1978) had a unique understanding of what is now known as 'special needs' learners, as cited in Daniels, Cole and Wertsch (2007, p.340), "A child whose development is impeded by a defect [sic], is not simply a child

less developed than his peers, but is a child who has developed differently." These words of Vygotsky are useful for understanding such a child as having "developed differently" from those children in the mainstream, and also help us recognise and develop ways of treating and supporting these learners to facilitate their development in a caring and equitable way. The SIAS policy requires the teacher- in a mainstream class- to provide support to such learners in his or her classroom before seeking additional support for the learner. Furthermore, should the learner require specialised support that the teacher cannot provide, the learner is then referred by the teacher to an education department specialist in learning barriers for additional specialised support.

In terms of implementing the SIAS policy, the knowledge of the teacher's role and of the socio-economic and socio-cultural environment of the school, as well as the classroom environment is essential to understanding the kind of teaching and learning taking place, or what should be taking place in a particular classroom. In addition to detailing support required by learners with learning barriers, the policy alludes to the vital role of the classroom environment in identifying and providing support to a learner or learners, and how a teacher's approach to learning impacts the ability of the learners in his or her classroom to sustain attention during a lesson. It is understood that the teacher plays a leading role in the creation and sustaining of the classroom environment, as highlighted in White Paper 6 – which guides education in South Africa. The vital role played by the teacher and the classroom forms part of one of the targets of SDG 4 to increase the number of qualified teachers in the classroom as well as create more inclusive environments for learning (UNESCO, 2015). Thus, this research speaks to international matters at play.

Understanding the teachers' perceptions of her or his learners and of the learning environment, and how this environment can influence a learner's behaviour, is thus crucial to providing appropriate and adequate support to learners with learning barriers. In terms of the current research study, this environmental/social context factor can be seen to link with the work of Vygotskian researchers. This body of research has emphasised the role of 'mediators' in assisting their learners to consciously and mindfully pay attention during a lesson, and how vital this is for their learning (Bodrova & Leong, 2007). Therefore, based on such research, such as that of Harrison and Muthivhi (2013) it can be argued that to be effective, mediation should provide an environment, and the mediator (the teacher), with the tools to teach in a way that would be beneficial to learning (Harrison & Muthivhi, 2013). These researchers argue that, in the Vygotskian sense, it is through mediation that the higher mental functions, one of which is attention, can be developed and that through this, a learner's self-regulation can be achieved (Harrison & Muthivhi, 2013; Kozulin & Gindis, 2007). Mediation, here, refers to the guidance of a culturally more competent other, in this instance a teacher, who guides the child to acquire scientific [schooled] concepts in a uniquely social zone, called the Zone of Proximal Development (ZPD). The ZOD represents a dialogical space opened between teacher and taught in which meaning is co-constructed throughout development.

Attention is a mental function or skill many learners, especially young learners, in the classroom environment have difficulty developing, and it is often assumed by educators and researchers to have developed before children start attending school. However, many competing factors may impede a young child's ability to pay attention in the classroom. Within the classroom environment, many distractions can be militating against children being able to sustain attention, or focus on a task, such as

the presence of other learners, noise, bright lights, busy walls, and lots of movement, all of which, for sensitive learners, can cause significant impediments to learning. Vygotskian researchers understand *attention* to be a higher mental function that is a deliberate and conscious focusing of the mind (Bodrova & Leong, 2007). Cognitive development researchers consider this process to be a higher mental function that enables a child to learn optimally within the classroom environment (Bodrova & Leong, 2007). For example, to listen to the teacher's instruction, the learner first needs to make a conscious effort to listen to understand the instruction, and this is not innate but must first be learned, and then be mediated. At the same time, the learner needs to be able to ignore or shut out all the other stimuli, including noises and other distractions within the classroom, and then to focus their attention to complete the task at hand.

According to Schoeman and Liebenberg (2017), Attention Deficit Hyperactivity Disorder (ADHD) is the most common psychiatric diagnosis among children in South Africa – with data on the prevalence of ADHD being limited (Schellack & Meyer, 2016). However, in my experience, there is a general assumption on the part of many educators and researchers that children who are unable to focus or pay attention are to be diagnosed (or labelled) as having ADHD. Research has indicated a rough estimate of ADHD diagnosis in the country is between 5-10% (Schellack & Meyer, 2016). This 'catch-all' labelling of ADHD is a common error on the part of many teachers when referring 'problematic' learners for additional support to an occupational therapist for an assessment. Documented prevalence of ADHD is influenced by various factors, including culture, geographical locations, diagnostic criteria, method of assessment, and source of information, with a paucity of research on this coming out of African countries (Bakare, 2012). Other concerns that the teachers are found to

have about learners, and lead them to label learners as problematic and as possessing or manifesting learning barriers, include poor scholastic achievement, not being able to complete work, and struggling with basic concepts, to name a few.

Furthermore, in my own practice, I have found that learners have been able to pay attention during an assessment, but I failed to understand why they could not do the same in the classroom. This led me to an interest in 'attention deficits' in children. I realised that children tend to focus better when in a one-on-one situation, which generally happens in the assessment, than in a group or a classroom situation.

In this investigation, I intend to explore ways of best-supporting learners with attention difficulties and to attempt to 'tailor-make' solutions that have the potential to ensure as far as possible that all learners benefit from this educational experience in the classroom. This research also looks at the approaches of the six study participants to identifying attention difficulties, as well as at the several relevant role players in providing support. These role players include teachers, occupational therapists, schools, and parents. Thus, the current research seeks to unpack the perceptions of teachers participating in this case study of learners' attention difficulties.

As has been mentioned, the work of Vygotsky underpins this research. In his research, he found the concept of self-regulation to be an enabling one for children – and adults – in terms of interacting appropriately within their social world. He saw self-regulation as giving a person control over their thoughts, actions and behaviour. In other words, self-regulation is the ability to control and direct one's feelings, thoughts and actions (Harrison & Muthivhi, 2013). Thus, based on this research and cognitive theory, self-regulation can be said to be a useful predictor of a child's academic

success (Fox & Riconscente, 2008). Without self-regulation, it can be challenging for a learner to pay attention to the essential task in the classroom.

Vygotsky emphasised the role of adults in the development of self-regulation in the child, both within the home and in the school environment (Fox & Riconscente, 2008). Moreover, Vygotskian research has recommended that learners be provided with the appropriate support in the classroom to facilitate the style of learning that suits their specific needs. For instance, a teacher may place a learner who has difficulty following instructions right in front of the classroom, ensuring that the learner is less likely to be distracted. This is one instance which serves as a demonstration of the significant role the teacher can play in aiding learning and development in the classroom. Guiding and encouraging parents to assist their children at home with attention challenges would be another example.

According to Vygotskian theory, the Zone of Proximal Development (ZPD) is critical in teaching. As noted above, the ZPD is described as the distance between the actual developmental level of a child in terms of independent problem solving, and the level of her or his potential development through problem-solving under adult guidance, or in collaboration with capable peers – in other words, through the process of mediation (Karpov, 2003). The Vygotskian theorists point out that the ZPD is not static, but changes according to the learner's or learners' learning experience and prior assistance (Karpov, 2003). For example, in the case of a learner who may have difficulty following three-step instructions, the teacher may understand the learner's actual development to follow a one-step instruction, with the learner's potential development to be following a two-step instruction. As a result, the teacher may request that the learner repeat the instructions given, or she or he may break the

instruction up into smaller, manageable chunks. When working with learners who have attention difficulties, as perceived by their teacher, understanding the ZPD of these learners enables teachers to teach in a way that encourages both learning and cognitive development.

The ZPD is a developmental space that leads to cognitive development, or what Vygotsky (1978) would call higher cognitive functions. In the 21st century, we can understand these as executive functions of the brain. For this reason, this research uses Vygotskian theory to understand and highlight the significant role that the ZPD plays in teaching and learning.

Executive functioning is the ability to control, inhibit, and monitor physical and mental activity and is considered to constitute a number of high mental functions – which Vygotskian theorists see as conscious acts based on social interactions (Ferryhough, 2016). Attention is one of the main subcomponents of executive functioning (Downes, Bathelt, & De Haan, 2017). As previously stated, teachers play a crucial role in developing these higher mental functions to facilitate learning. As a result, executive functioning skills can be understood as being dependent on how attention difficulties are managed in the classroom to facilitate effective learning and cognitive development.

Teachers' understandings and perceptions of these attention difficulties are vital as this affects how learners are approached, and subsequently affects their learning experience. For this reason, the work of Vygotsky and his followers is used in this research to understand and illustrate how the perceptions of attention difficulties of teachers motivate their reason for referral and influence the type of support given, or not given, to such identified or 'labelled' children in the classroom. To sum up, the

current research explores and highlights the vital role that the teacher plays in the classroom in providing learners with the appropriate support to facilitate optimal learning experiences for all learners.

1.3. Aim

The aim of the study is to gain an understanding of the participating teachers' perceptions of learners who experience attention difficulties in the classroom and, based on such perceptions, how these teachers select appropriate support for what they perceive to be learners, or learners' attention difficulties. Thus, in the course of this research, I intend to unpack the process of, and reasons for, the individual teachers' identification of learners as having attention difficulties and how they address these difficulties in the classroom. As mentioned previously, Vygotsky speaks to adults' vital role in learners' self-regulation in the classroom. The role of the teacher and their perception of their role is further highlighted in this research based on the understanding that teaching should not simply be about transferring skills and facts. Instead, it is understood to be about allowing learners to think "independently and creatively" in order to develop their skills (Bodrova & Leong, 2007, p.4) – and above all, emphasising the development of higher mental functions and the tools that enable learners to pay attention and focus on the task at hand in the classroom environment (Bodrova & Leong, 2007, p.5). For example, a learner may be paying attention to something other than what is expected of her or him, thus taking away from classroom or teacher expectations. This research sets out to begin an investigation into the various ways in which a sampled group of teachers manage the misdirection of attention challenges in the classroom.

This research attempts to provide a real-world account of how learners are perceived by the teachers in this study to have attention difficulties and are identified as such by the participating teachers. Through these various real-world accounts being shared, the subsequent support provided to these learners is explored. The data provided is intended to bring to light the daily challenges the participating teachers face in providing appropriate support to these learners whom these teachers perceive to have attention difficulties. The study aims to address these challenges, and, by bringing them to the fore, develop various strategies and techniques which might be useful to teachers, and be best practices for remedying the situation in the future.

1.4. Rationale

Within my rationale, I wish to highlight three reasons driving my research – including my experience of incorrect identification of attention difficulties in learners, how teachers make a referral for occupational therapy support and lastly, to build on current literature in South Africa.

Firstly, in my experience working as an occupational therapist within the Department of Education, and assessing those learners who have been referred with attention difficulties, I have come to understand that their attention difficulties are not being identified correctly and managed appropriately within the classroom. I have come to realise that this is not necessarily the fault of the teacher in any direct or straightforward way. It appears to have become common practice that learners are assumed by teachers to have or to be diagnosed as having, ADHD if they have difficulty paying attention or completing their tasks in the classroom. Ergo, the referral is made for an assessment. My main finding in the course of my conducting the routine

assessments has been that many of these learners thrive in smaller groups, or in one-on-one situations, and often the teacher cannot provide such support on a daily basis. The reasons for a teacher assuming a learner to have ADHD, and not being able to adequately address this problem, due to limited capacity in the classroom, occur across many schools and are together viewed as barriers to a teacher providing in-class support. The specific reasons are that teachers are burdened with substantial, at times, overwhelming class numbers, rush to complete the prescribed curriculum, and, amongst other pressures and demands, they also, at the end of a year, are expected to produce satisfactory results in terms of their learners' academic performance.

Karpov (2003) speaks to the crucial role played by the teacher in the classroom in facilitating her/his learners' learning. The average classroom is likely to contain one or more children with attention difficulties, and, as such, the teacher needs to be equipped to deal with these 'neurodiverse' learners. With that being said, this research seeks to obtain an in-depth understanding of what is currently happening in classrooms and how this can be more effectively or usefully supported by an occupational therapist, in this way, bringing together education and occupational therapy to support learners conjointly.

Secondly, the main research question speaks to occupational therapy referrals. In my experience, teachers send their learners for occupational therapy support in the classroom, hoping that the learner will return from an assessment and therapy with the problem solved. However, my opinion is that this is not necessarily the case, as in most cases, the effectiveness of therapy depends on the joint effort of all role-players within the learners' environments.

Thirdly, this research seeks to build on current literature in the South African context with regards to how learners with attention difficulties should be supported, and the gaps that need to be addressed, including teachers' understandings of attention difficulties, how support can be provided within the classroom, and investigations of existing barriers to the support given to learners. Narrowing this research gap may provide assistance to the education system/departments in providing better and more appropriate support to both learners and teachers. Furthermore, understanding learning and how learning takes place in the classroom is essential in this research. It is also essential to be cognisant that learning, together with learning materials and pedagogy should capture the interest of learners for learning to be effective, thereby facilitating optimal learning. However, paying attention and focusing is also a significant part of learning, and thus understanding these attention difficulties as perceived by the teachers who are mediating learning should be managed appropriately to provide learners with optimal learning experiences.

Finally, as previously stated, this research is framed by the work done by Lev Vygotsky and his followers, who did substantial research on how children learn and the role of their socio-cultural environment in their learning process and ability. The work provides a framework to help put the findings into context and literature in substantiating the findings. I use the work of Vygotskian researchers to understand how the cognitive and emotional development and learning of a child occur in order to facilitate and encourage optimal learning in the classrooms. Moreover, Vygotsky and his followers' work inspires my understanding of teaching and learning within the classroom (Bodrova & Leong, 2007).

1.5. Research Question

1.5.1. Main research question

What are the participating teachers' perceptions of their learners' attention difficulties regarding identification and referral for occupational therapy support within their primary school classrooms?

1.5.2. Specific questions

- How do the participating teachers perceive attention difficulties in their own classroom contexts regarding pedagogical strategies and learning?
- What are the perceptions of the participating teachers regarding how attention difficulties that are manifested during their classroom teaching and learning should be managed?
- What are the perceptions of the participating teachers of an occupational therapist's role in addressing the problems of attention difficulties which manifest during classroom teaching and learning?
- How are the learners' needs with regard to addressing attention difficulties currently being managed in the classroom by these participating teachers?

1.5.3. Objectives

- To determine how attention difficulties are perceived by teachers in order to identify how it impacts their pedagogical strategies and learners' learning in the classroom.
- To identify the manifestation of attention difficulties in the classroom determined by the perceptions of teachers in order to correctly identify and provide adequate support to these learners.

- To evaluate the occupational therapist's role from the teachers in order to provide support for attention difficulties in the classroom.
- To determine the management of attention difficulties based on the perceptions of teachers with the intention of ascertaining the effect on teaching and learning.

CHAPTER 2

2.1 Theoretical Framework

2.1.1 introduction

A theory presents a systematic way of understanding and explaining phenomena, and suggests how to develop effective ways to influence and change behaviour. Thus psychology theory is used to underpin and guide this research study. In particular, the work of Vygotsky (1978) and his followers is used to understand how learning and the construction of knowledge take place. Vygotsky believed that knowledge is co-constructed through social mediation and physical manipulation of objects through the social context and the development of higher mental functions¹ (Bodrova & Leong, 2007). According to Vygotsky, learning precedes cognitive development (Vygotsky, 1978). Thus, learning is viewed by Vygotskian theorists as more than the ability to think, but instead as the ability to think about a variety of things which enables one to pay attention to many different things simultaneously (Vygotsky, 1978).

The following section explores concepts relevant to the research question using already existing research. These are based on work done by Vygotsky and his followers which has been developed to view and understand the world, especially the ways in which children learn. The aim of exploring and reviewing this work is to gain an in-depth understanding of the role of the teacher in the classroom in facilitating he/his learners' cognitive development and learning processes. Furthermore, the literature review is intended to provide insight into the role of teachers in the classroom

¹ In the 21st century, we might refer to these higher cognitive functions as executive functions.

concerning attention difficulties and is intended to be coupled with the process and results of other previously conducted studies in this area.

2.1.2 General Genetic Law Of Cultural Development

This research study uses a Vygotskian and neo-Vygotskian perspective on the child's cognitive and emotional development, emphasising the social, cultural, and historical conditions and context of this development (Daniels et al, 2007). For Vygotsky (1978) and his followers' learning is seen as a completely separate entity from development, and precedes development. In this way, humans are viewed as transforming their environment, rather than simply adapting to it, as they are themselves transformed in development (Vianna & Stetsenko, 2006). Furthermore, Vygotsky viewed learning as taking place on two planes: firstly, on the social plane, which appears between people, and then on the individual plane, which appears within the child (Wertsch & Tulviste, 1992). This is a general law that Vygotsky developed to better understand how learning and development occur. Thus, his work focuses on combining both the social and cognitive aspects and highlighting learning and development as part of social interaction.

Contrary to beliefs about individual functioning, Vygotsky highlights the importance of social interaction and how it may be used to better understand terms such as attention, cognition, and memory (Wertsch & Tulviste, 1992). In simple terms, this highlights learning as first taking place through social interaction with the teacher, the cultural tool in this case (Wertsch, 2007). Through this interaction with the learners talking to each other, they can better develop meaning and a greater understanding of the world around them. For example, teachers have different classroom

expectations in terms of how learners should behave during learning and teaching. Some teachers do not want their learners to be talking in the classroom, while others may not object to this. Teachers manage their classrooms in individual ways, and different learners respond differently to these various different contexts. Nevertheless, the environment has a significant impact on learners' learning and development.

Although mental functioning is an action that is viewed as being carried out by individuals, Vygotsky claims that this is only possible through communication and learning from others (Vygotsky, 1978). These tools enable the learner to attend, remember, and think about their environment in which the teacher provides assistance and contributes to the development of her learners' higher mental functions (Bodrova & Leong, 2007). One example of a teacher contributing sensitively to a learner's individual way of learning would be the teacher understanding that a particular learner needs to wiggle in his or her chair periodically to enable that learner to focus better. Another example would be the teacher understanding and accepting that a learner does not have to be looking at the teacher when paying attention.

Thus, this research seeks to unpack how the perceptions of a group of Grade 1 teachers understand attention difficulties which result in the subsequent referral to an occupational therapist for additional support. Consequently, the development of concepts such as the Zone of Proximal Development, egocentric speech and inner speech come into play (Wertsch & Tulviste, 1992). The following section unpacks related concepts, such as mediation, Zone of Proximal Development, internalisation, and self-regulation in more detail, together with their in the classroom.

2.1.2.1 Mediation

As previously mentioned, Vygotsky emphasised the social role in the child's learning experience and also the important role that the adult plays therein (Fleer, 2010; Harrison & Muthivhi, 2013). Mediation entails using tools and symbols to aid the development of learners' higher mental functions which they need for engaging with an educational task within the environment, in this case, the classroom (Bodrova & Leong, 2007; Wertsch, 2007). Furthermore, mediation is a goal-directed activity provided by the teacher and it ideally creates an optimal environment for learning (Harrison & Muthivhi, 2013). Vygotsky views the process of mediation as one in which the teacher uses signs to aid the child's learning experience and, considers the social and cultural qualities. In this way, the teacher assists with the further language development of the child (Harrison & Muthivhi, 2013). This in turn leads to self-regulation, a concept to be elaborated on later.

The current research study seeks to unpack how learner with perceived attention difficulties is accommodated in the classroom based on the perceptions of their teacher. In other words, how do the perceptions of the teacher regarding attention difficulties affect how the teacher mediates or provides assistance in the classroom. For instance, some teachers expect that all learners are obliged to complete lengthy writing tasks, an activity which may not suit every learner in the class as not all of the learners may have the same attention span. Children are all different, and learn differently, and, for example, some may have to stretch their legs intermittently to focus. When these learners are not given this opportunity, they tend to disrupt others (Hardman, 2021). Thus, it may be helpful for the teacher to allow the learner to have movement breaks between written tasks. However, this can only happen if the teacher understands and knows the reasons for, and the importance of, movement breaks.

Moreover, the teacher needs to understand their influence on learning experiences in the classroom, as the teacher's role is indispensable to mediation.

2.1.2.2 Zone of Proximal Development

Karpov and Haywood (1998), described how adults help children internalise higher mental processes through the use of psychological tools. Through this process, a new Zone of Proximal Development is created which facilitates the further development of the higher mental processes (Karpov & Haywood, 1998).

Instruction mediates learning, thus contributing to a child's cognitive and executive function development (Karpov, 2003). This leads to the development and functioning of the Zone of Proximal Development (ZPD), which is the distance between a child's actual development and their developmental potential, both of which are facilitated and guided by an adult or by interacting with peers (Chaiklin, 2003; Hedegaard, 1990; Wertsch & Tulviste, 1992). In other words, the ZPD recognises that the child still needs to learn something new, moving developmentally from their current level with the teacher's guidance or that of others. The ZPD is continuous, and as you learn new things, there is always the potential to learn more with the assistance of someone else, or other persons. This is why Vygotsky placed so much emphasis on the instruction given to the child, and the way in which it is given, as it enables the child to reach their developmental potential and thus learn more in an ongoing process (Hedegaard, 1990; Wertsch & Tulviste, 1992). Vygotsky is clear that not just any instruction is effective in developing a child. Instead, the instruction should be linked or geared to the potential development of the child rather than the child's actual level of development (Hedegaard, 1990; Wertsch & Tulviste, 1992). This conceptualisation of

how learning takes place differs from the traditional way of thinking about learning – which sees a child as needing to be taught in a manner that is on the same level as their actual developmental level (Vygotsky, 1978). This Vygotskian approach includes how the instruction is given, for example, looking at the difference between a teacher who teaches from the front of the classroom in an authoritarian way versus a teacher who goes to the learners' desk, gets onto their level, and engages directly with them, thus, interacting with them in a social context.

If one uses the Vygotskian lens, one may come to understand how teachers' perceptions of attention difficulties may affect the ways in which they provide instruction to a child whom they have perceived, or labelled, as having attention difficulties. Knowing and understanding that there are two levels of development, the actual and the potential, may determine how a teacher provides instructions to all her learners, including those s/he may have perceived to have attention difficulties. Thus, based on the findings of this study I will argue that teachers need to know the ZPD of the children in their class in order to know how to pitch their instruction at an appropriate level, or, if practically possible, at varying levels, to make learning conducive to their learners, if possible in an individualised way to cater for those perceived to have attention difficulties. Learning should not be directed at the child's, or children's achieved developmental levels, but should instead be directed to their potential level because if directed at their actual developmental level, it may be rendered ineffective in terms of their ongoing development (Del Rio & Alvarez, 2007). This can make learning both relevant and exciting to the child, whilst at the same time gripping and sustaining their attention.

The ZPD leads to the child's active engagement with the learning process, and the child can accomplish more with guidance and/or assistance from the teacher (Schuler, 2011). This understanding of the part that the ZPD plays in the learning and development process can in turn lead to an understanding that school-based learning involves the learning of concepts, including scientific concepts, through the informed mediation of the teacher (Chaiklin, 2003). In this context, a 'scientific concept' refers to knowledge, in abstract form, that must be taught in a structured way, and cannot be acquired outside of actual instruction (Chaiklin, 2003). The process of acquiring language and learning to read, for example, relates to the acquisition of scientific concepts (Chaiklin, 2003). These concepts become internalised and are then intertwined with everyday concepts through development (Chaiklin, 2003). One can conceive of scientific concepts as 'schooled' concepts, that is, concepts that are necessarily taught, generally in a schooling environment (Hedegaard, 1998).

2.1.2.3 Internalisation

Moving from the social level to the individual level of development takes place through internalisation (Kozulin, Gindis, Ageyev, & Miller, 2003). Internalisation is understood to occur once a concept has been taught to the learner within a social setting; it thus becomes internalised within the learner when the external mediational practices have been mastered (Bakhurst, 2007). Thus, learners can use information that has been previously taught intentionally. This assumes that the learners are being expected to learn on demand as they progress through school through their understanding of different information that has previously been taught. Thus, guiding their behaviours and follow-through of instructions in order to keep up with the plan

set by the teacher, whilst being able to pay attention and remember purposefully (Bodrova & Leong, 2007).

According to Daniels et al. (2007), for internalisation to take place, external support is required. Learners who have attention difficulties need extra support to internalise the necessary psychological tools for this to happen, and ultimately, the type of support offered allows for internalisation to occur. When adults share psychological tools, such as language, this process enables learners to internalise these tools for themselves (McLeod, 2018). Thus, in this process scaffolding takes place (Turuk, 2008). The scaffolding process allows the teacher to provide clear 'scaffolded' instructions and set clear expectations for the learners (Turuk, 2008). Through this process, the learners are able to internalise what was previously demonstrated by the teacher and to apply it to other and future situations, which they then problem-solve for themselves (Turuk, 2008). It is important to note that there is a distinction between scaffolding and the ZPD. While Wood, Bruner and Ross (1976) introduced the notion of scaffolding as a mechanism for solving problems or doing tasks in the classrooms, the ZPD refers to a much longer and ongoing developmental process that takes place over the years. However, one can think of scaffolding techniques as mechanisms for building internalisation, within a ZPD, over time. In this process, the ZPD creates a shared social experience between the teacher and the learner. This concept can be seen as and is very closely linked to mediation, already discussed in Section 2.1.2.1 above.

2.1.2.4 Self-regulation

Through mediation in the ZPD, self-regulation develops. This is the ability of a person to control thinking and behaviour by building internal schemas and structures,

which aid development (Muthivhi, 2015). According to Vygotsky, many aspects of self-regulation are learnt during preschool years- and therefore, teachers or early childhood educators have the ability and opportunity to profoundly influence a child's development (Bodrova & Leong, 2007). Examples of self-regulated behaviours include delaying gratification, being rapidly able to switch between different tasks, focusing attention, and controlling one's emotions (Harrison & Muthivhi, 2013). Self-regulation develops in social settings where a more knowledgeable other assists the child in problem-solving tasks (Kozulin et al., 2003). The first stage of this assistance is through private speech, a stage which provides the opportunity for adults to help regulate children's behaviour, and the second stage is make-believe play, which provides a space for roles and consequent rules to be followed (Kozulin et al., 2003).

Self-regulation is a concept that is key to understanding the attention difficulties of a learner as it allows them to act in a deliberate and planned manner (Bodrova & Leong, 2007). The teacher plays a vital role in providing the psychological tools that enable a child to self-regulate (Harrison & Muthivhi, 2013). Thus, self-regulation leads to a learner becoming a master of their thinking, which in turn allows for learning and development to occur (Bodrova & Leong, 2007). In other words, self-regulation enables a learner to engage independently with learning and problem-solving. Teachers need to use mediation as a tool, which can be done in the form of play as well, as play also helps with a child's self-regulation (Harrison & Muthivhi, 2013). The teacher can use play to guide the conversation and the learning of the child by setting up a play station or game that is stimulating and age-appropriate and triggers the child's imagination (Harrison & Muthivhi, 2013).

As noted above, self-regulation plays a crucial role in the ability to focus and sustain attention and in attention difficulties. Thus, if a learner is able to self-regulate, this translates into more appropriate – and acceptable in terms of a teacher’s expectations - behaviour in the classroom. For example, if a learner can effectively self-regulate, they are more receptive to learning content, even if they find that the content is not particularly interesting, but is prescribed (Bodrova & Leong, 2007). Often, learners are paying attention to other things in the classroom because they cannot focus their attention appropriately, but their attention can be redirected with appropriate support. Unfortunately, teachers often interpret these off-task behaviours as disruptive and unmanageable.

Thus, learners' self-regulation in the classroom enables a teacher to focus on pedagogical strategies and learning, as the learners can manage their actions and emotions adequately. Therefore how the teacher approaches a learner with these attention difficulties is vital to understanding the learners' ability to self-regulate.

2.1.3 Executive Functions

As previously mentioned, *executive functions* can briefly be defined as those functions which facilitate or equip a person for planning, organising and completing tasks (Russell, 1996). Furthermore, executive functioning skills are considered by psychologists as higher mental functions, which means that they are conscious acts based on social interactions (Fernyhough, 2016). These higher mental functions culminate in self-regulation of thought and behaviour, which develops into different forms of thinking (Fernyhough, 2016; Luria, 1965). Vygotsky's work draws attention to the quality of mediation in developing higher mental functions regarding learning, and

it emphasises the role of mediation in the development of executive functions (Kozulin & Gindis, 2007). In turn, the type or quality of mediation affects the quality and sustainability of a learner's attention within the classroom. While Vygotsky never talked about executive functions as such, his collaborator, Luria, was amongst the first to recognise that the brain is a functional system. Further, Vygotsky's original notion of higher cognitive functions is captured in the modern notion of executive functioning.

Executive functions include skills such as "planning, monitoring, and inhibiting thought and action" (Ferryhough, 2016: p.4). The above-mentioned contribute to a child's ability to maintain goal-directed behaviour (Henry, Messer, & Nash, 2012). According to Henry et al. (2012), this main ability comprises four main skills. The first is the skill or ability to be flexible in thought and thinking, that is, the ability to adapt otherwise known as switching (Henry et al., 2012). The second skill is working memory, which is the ability to remember and process information provided (Henry et al., 2012). The third is the ability to inhibit or control inappropriate responses, and lastly, fluency, which is the ability to generate new responses (Henry et al., 2012). These executive functioning skills develop throughout the lifespan of the child and into adulthood. The inhibition ability matures by the age of 10-12 years, and working memory and switching continue to develop throughout adolescence and adulthood (Huizinga, Dolan, & van der Molen, 2006). However, most research supports the theory that the overall structure of the executive functioning system is relatively stable by the age of seven (Downes et al., 2017).

Difficulties with executive functioning can affect a child's completion of everyday tasks such as brushing their teeth and even packing their bag. They may also have difficulties with impulse control, poor attention to tasks, and difficulty remembering

simple details or instructions. This kind of 'childish' behaviour is often what teachers experience in the classroom. It is in this context that this research study seeks to unpack the sampled group of teachers' understanding of this behaviour, how they label or define it, and how it presents in the classroom.

2.1.3.1 Attention

Attention is vital to a child in attaining and developing cognitive and behavioural skills (Commodari, 2013). Moreover, attention plays a crucial role in learning as achievement in academics is not only based on mastering new skills but also on improving existing skills (Commodari, 2013). Many different variables make up the concept of attention (Commodari, 2013). Some of these variables include reaction times, sustained attention, selective attention, voluntary shifting and immediate span of attention (Commodari, 2013). These different variables allow children to perform and engage appropriately in their everyday functions (Commodari, 2013). As mentioned previously, and of relevance to this study, appropriate mediation – in the case of this study, on the part of an informed and sensitive teacher - can assist the learners' ability to focus and pay attention (Bodrova & Leong, 2007).

The development of executive functioning skills provides children with the attention skills they require to learn effectively and to apply the knowledge they have gained in a testing situation or in their everyday lives (Zelazo et al., 2016). This is possible, particularly in the classroom, due to the fact that attention ensures the development of cognitive and behavioural skills (Commodari, 2013). Understanding the various ways in which various learners experience their attention difficulties is essential to put in place appropriate support for optimal learning within the classroom. For this reason,

Vygotsky believed that mediation is key to the development of higher mental functions (Kozulin & Gindis, 2007).

2.2 Literature Review

The literature review is key in research in order to evaluate current research in this particular field of interest linked to the research topic. It is used as a means to provide evidence which may or may not support the findings of this research study. For this literature review, keywords such as “executive functions”, “attention difficulties”, “Grade 1 teachers perceptions” and “occupational therapy support” were used as search options on the following platforms; EBSCOhost and Google Scholar. These keywords were identified as key within this research.

2.2.1 Executive Functions and Attention Difficulties in the Classroom Linked to Academic Performance

As was described and discussed in the previous section, executive functions play a vital role in a person’s engagement with everyday life situations, such as social interactions and academic performance (Vandenbroucke, Spilt, Verschueren, Piccinin, & Baeyens, 2018). For children to be successful in their education, their executive functions need to be at an optimal level to enable them to stay focused on the task at hand. For this reason, much research has gone into better understanding executive functions and how these aid cognitive development (Vandenbroucke et al., 2018). As has been described, the three main areas of executive functions include working memory, inhibition, fluency and flexibility (Henry et al., 2012; Vandenbroucke

et al., 2018). Previous studies have further highlighted the vital role of executive functions in self-regulatory behaviours and academic performance (Obradović, Sulik, Finch, & Tirado-Strayer, 2018). This research seeks to unpack further how executive functions, such as the ability to pay attention, play out in the classroom and teachers' perceptions thereof.

Research has shown the development of these various executive functions. For example, working memory is said to develop between the ages of three and seven years, whereas inhibition develops between one and 3 years (Duval, Bouchard, Pagé, & Hamel, 2016). Flexibility and planning develop between the ages of three and five years (Duval et al., 2016). The ages at which these executive functions develop illustrate the importance of the level of developed skills needed by a child when she enters Grade 1 at the age of six, turning seven. However, this developed skill level is not always the case in practice.

Working memory has been shown to significantly and specifically impact Mathematics achievement, while inhibition and flexibility impact the child's general learning in the classroom (Monette, Bigras, & Guay, 2011). In addition, working memory has been linked to assisting learners to respond appropriately to novel social situations (de Wilde, Koot, & van Lier, 2016). The overall role of executive functions has been shown to aid reading and writing achievement in older children between the ages of nine and twelve (Monette et al., 2011). However, a study conducted by Monette et al. (2011) found executive functions to play a more direct role in Mathematics achievement than in the development of reading and writing for younger children. Other studies such as; Bull, Espy and Wiebe (2008) and Clark, Pritchard, and Woodward (2010), have supported these results, yielding similar results to those

of Monette et al. (2011). However, this does not mean that executive functions do not play an important role in the development of reading and writing in younger children. The study done by Monette et al. (2011) found that there is an indirect relationship between executive functions and the development of reading and writing. Monette et al. (2011) argued that the reason for this is because reading and writing have, in other research, including that of Vygotskians, shown a high correlation with social skills and development (Monette et al., 2011).

Overall, executive functions play a crucial role in attention in the classroom, and this directly impacts a child's academic performance (Breslau, Miller, Breslau, Bohnert, Lucia, & Schweitzer, 2009; Pingault, Tremblay, Vitaro, Carbonneau, Genolini, Falissard, & Cote, 2011). Thus, the more capable the child is of focusing on current work in the classroom, the better their academic performance will be (Stipek, Newton, & Chudgar, 2010). For a child to follow instructions, s/he needs to fully comprehend, and attend to, what is asked of him or her before s/he is able to carry out the instruction successfully (Breslau et al., 2009). Furthermore, the ability of a child to self-regulate enables them to follow through on the instructions provided by the teacher (Rimm-Kaufman, Pianta, & Cox, 2000).

2.2.2 Teachers' Perceptions In The Classroom

This particular research study is an exploration of the perceptions of attention difficulties in Grade 1 teachers, how they have identified in children they have taught, and the ways in which these perceptions, informed or did not. In turn, how this affected their classroom pedagogy as well as the learning processes of these learners. The research is based on the assumption gleaned from the literature, and from my own

experience as an occupational therapist, that the nature and quality of an interaction between the teacher and the learner is influenced by the teachers' understanding of the learner (Ready & Wright, 2011).

A few studies have looked at the implications of teachers' perceptions of children's attention and learning difficulties, and how these perceptions affect their interactions with the children in their classes. According to studies done by Hamre, Hatfield, Pianta, and Jamil 2014, and by Ready and Wright (2011) on the impact on the development of preschool children of their interactions with their teachers, the teacher sets up the classroom based on her or his perceptions of what works for them, which includes the allocation of ability groups, marks, and resource allocation. Much of this research unpacks how teachers' perceptions surrounding socio-economic status, race, and home background impact teaching and learning in the classroom. A valid point raised in this research brings attention to whether the inequalities associated with these factors are based solely on the perceptions of the teacher, or if there is a proven relation between the differences in backgrounds of learners and their academic performance (Ready & Wright, 2011). There has been evidence to support both sides of this debate. However, whether one agrees that children's social-economic or racial background influences their academic performance, I argue in this study that it is essential to take into account the social interactions between the teacher and learner in the classroom and the possible impact this has on a child's development and academic performance.

The findings of the aforementioned study done by Ready and Wright (2011) on the impact of both background and classroom context on the development of children's cognitive abilities showed the teachers' perceptions to have a direct impact on the

interactions in the classroom. In their study, most of the teachers' perceptions were found to be based on the learners' social class, which was found to be inaccurate when measured against the children's academic performance (Ready & Wright, 2011). On the other hand, the study conducted by Hamre et al. (2014) found that, when a teacher adopted a more responsive and unjudgmental approach to their learners, this yielded positive results. The learners were able to develop language and working memory skills at a more rapid pace, which led to less conflict between the teachers and learners, as the teachers were more organised and managed their time with their learners effectively and productively (Hamre et al., 2014). Another study conducted by Williford, Maier, Downer, Pianta and Howes (2013) found that teachers in their study who adopted an emotionally sensitive and organised approach in their interactions with their learners had a more positive influence on the learners' classroom engagement and on the development of their language and literacy skills. Research such as this serves to suggest a positive way of providing learning opportunities in the classroom (Williford et al., 2013). This was further confirmed by a study done by de Wilde et al. (2016). Their study looked at the links between children's working memory and their social relations with their teachers and their peers and found positive social experiences to be beneficial to learners development (de Wilde et al., 2016).

The study conducted by de Wilde et al. (2016), which found an association between the level of working memory of the learner and the level of teacher warmth, concluded higher working memory is linked to more warmth given by teachers to their learners. This further highlights the importance of the nature and quality of the role that the teacher plays in the learner's development and level of engagement in the classroom. It highlights the benefits of having the kind of supportive schooling environment that supports teaching and learning in positive ways. Moreover, the teacher's warmth

mentioned by de Wilde et al. (2016) is also linked to the responsiveness of the learner. Having a teacher who is more open and sensitive to responding to her learner's needs in the classroom, according to the findings of the studies mentioned, is likely to yield more quality teacher-learner interactions (Williford et al., 2013). These quality interactions have a strong potential to lead to a more engaged learner (Williford et al., 2013).

In addition to the presence of engaged learners in the classroom, when such learners are supported with a positive approach on the part of the teacher, this results in the learners developing greater self-regulation skills which are linked to working memory and inhibitory skills (Williford et al., 2013). Supporting this, Hamre et al. (2014) found a correlation between responsive teaching and greater inhibitory control. The routines and structure provided by teachers in the study gave the learners a greater sense of inhibitory skills which led to greater self-regulation (Hamre et al., 2014). The teachers' positive approach to classroom management and to the cognitive stimulation of their learners were also attributed to greater inhibitory skills (Hamre et al., 2014).

Moreover, in the aforementioned study done by de Wilde et al. (2016), learners with higher working memory were found to be better equipped to deal with adjusting their behaviour and responses appropriately to new situations. At the same time, these researchers found that poor relationships between learners and teachers resulted in learners' poor working memory (de Wilde et al., 2016). Furthermore, when a learner can handle their frustration and stress levels, self-regulation seems to assist the learner with learning in the classroom (Commodari, 2013). This research demonstrates the importance of learners having developed their self-regulation by the age of six in order to be school-ready. Thus, a learner's being able to achieve

academically depends on their ability to master new skills and refine their already existing skills (Commodari, 2013). For instance, as has been mentioned, a learner's ability to control and sustain their attention in the classroom supports the learning process in which they are engaged (Commodari, 2013). The study conducted by Commodari (2013) with pre-school learners found those learners with secure attachments to their teachers to be developing and to have improved attention skills and the other necessary skills to assist them with learning.

Attention is often seen as a critical skill for a learner to have in the process of facilitating learning in the classroom (Stipek et al, 2010). Often the means of assessing, by the teacher, inattention in the classroom is based upon the perceptions of the teacher, which would probably indicate difficulty with following instructions, distractibility, and poor task completion (DuPaul & Weyandt, 2006; Hinshaw, 1992). Thus, placing a strong emphasis on the learners' ability to pay attention and on their executive functions, reinforce what has already been stated in this section about the importance of teachers being able to respond sufficiently to the needs of their learners. When a teacher can sufficiently support her learners' needs, it clarifies expectations around interactions from both the teacher and the learner, reduces anxiety and uncertainty, and provides learners with more space to self-regulate (Choi et al., 2016).

2.2.3 Occupational Therapy In The Classroom

According to Case-Smith and O'Brien (2010), occupational therapy (OT) can be used for difficulties and disorders that may limit the social participation of a child. These difficulties may include executive function skills and attention difficulties. OT services can take place using a direct or indirect approach, where a direct approach

involves working with learners individually or in a group; and an indirect approach includes providing support to teachers by suggesting ways for them to better incorporate and include 'difficult' learners in the classroom (Case-Smith & O'Brien, 2010). Examples of goals that can be set by the OT related to executive functions include self-management which could be facilitated by learners taking turns and following directions, and problem-solving which could include negotiating with friends and asking for help (Case-Smith & O'Brien, 2010).

When establishing and determining the nature of the intervention required, occupational therapists (OTs) investigate a range of different areas in order to understand the difficulty in greater depth and detail (Chu & Reynold, 2007). The different areas for an OT to consider as relating to the difficulty include the environment, the task demands, family support, and child-environment-task balance (Chu & Reynold, 2007). Understanding the environment is particularly important for this research study as the environment includes the school and the role-players within the school, one of whom is the teacher. It is also essential to consider the child-environment-task balance as this provides a greater understanding of the learners' ability to complete the required tasks with their current level of skill and ability (Chu & Reynold, 2007). For instance, this is an area in which the OT can assist the teacher in better integrating the learner with attention difficulties in the classroom and the activities taking place in that environment.

Other OT interventions that have been relatively successfully incorporated in the classroom include the use of assistive devices explicitly used for learners with attention difficulties. One example of a type of assistive device is weighted vests which provide learners with the kind of input that has a grounding effect on them. It has been

found that learners can sit for more extended periods when wearing these weighted vests (Buckle, Franzsen, & Bester, 2011). Another example of an assistive device is a cushion that provides the learner with movement while sitting (Pfeiffer, Henry, Miller, & Witherell, 2008). There have been positive results from this cushion device, which has been found to help learners to pay attention for more extended periods (Pfeiffer et al., 2008). These assistive devices are novel, and the effective use of them also depends on how the teacher manages the classroom. However, there has been contradictory evidence to refute the use of such assistive devices in the classrooms, as these may end up being more of a distraction than improving attention difficulties (Buckle et al., 2011).

2.3. Conclusion

The review has sought to provide a comprehensive understanding of the different areas linked to the research question and to afford a background to the topic researched.

According to Vygotsky (1978), the importance of the teacher's role in a child's learning should not be underestimated. He argued that the child becomes involved in a cooperative dialogue with the "tutor", and gradually, through social interaction and some sense-making, the child develops the ability to solve problems for himself [sic] (Vygotsky, 1978). Gindis (1999) saw learning as a shared-joint process taking place within a social context. This suggests that, with appropriate assistance and guidance provided by adults, a learner can learn satisfactorily and thus develop. Vygotskian theory provides some insights regarding perceptions on the part of educators of attention difficulties experienced by learners and how and why learners perceived to

have such difficulties need to be adequately supported by teachers and occupational therapists in order to realise the desired outcome of learning. The literature also suggests ways in which teachers' perceptions can negatively or positively affect how the teacher teaches and approaches her learners in an inclusive classroom

The literature review presented in this chapter included descriptions of various functioning children need to have for learning and development to take place, and studies done in this area, on classroom situations and on teacher-learner interactions. However, it was made evident that there is a gap in South African literature with regards to perceptions of teachers in the classroom, how executive functions play out in the classroom as well as the role of OT in the classroom. Much of the research above is based on international studies. The role of OT in the classroom is an area where there is a big gap internationally as well. As noted above, the OT interventions in the classroom are mostly linked to the use of assistive devices and none to support programs or curriculum support.

CHAPTER 3

Methodology

3.1 . Introduction

The focus of Vygotsky's work was on education and on learning in a classroom situation (Kozulin & Gindis, 2007; Vygotsky, 1978). This research found that understanding the specifics of what is taking place in the classroom and how teachers approach teaching and learning helps one provide the appropriate assistance in aiding the growth of learners of their higher mental functions (Kozulin & Gindis, 2007). This understanding enables better targeting of the intervention process and understanding of the complexity of different learners and the various different ways to facilitate their learning.

The methodology section seeks to describe and discuss how the current research study was conducted. This discussion includes a description of, and rationale for, the research design, and looks at the principles that inform this research and at the choice of research sampling type. Next, the case study research method employed in this study is discussed, along with the study's design. The method of data collection is described and elaborated on, together with the data analysis process, which is unpacked in detail. The chapter ends with the part of the research methodology which outlines the ethical considerations taken into account for this study and presents a timeframe for the conducting of the research.

3.2. Research Design

A research design is defined by Leedy and Ormrod (2013) as a means to problem-solve. The research design enables a researcher to develop a plan to conduct the study which will solve this problem by answering the research questions (Maxwell, 1996). This research intends to make connections between the participating teachers' perceptions and their learners and to build an understanding of these teachers' perceptions and how these relate to the identification of learners perceived to have attention difficulties. Thus, the research design enables the researcher to connect the question to the data and findings collected through questioning complex social realities (Anderson & Biddle, 1991; Van Wyk and Taole, 2015). In essence, the research design provides a means of communicating the framework of the study (Cohen, Manion, & Morrison, 2005; Van Wyk & Taole, 2015). Thus, answering the research question(s), developing and analysing the data, building on a theory and ensuring the validity of the study (Maxwell, 2008).

For this particular study, a qualitative research design was selected. Qualitative research is often used for research in the education field as it provides an understanding of the reasons for the occurrence of phenomena and provides a descriptive tool for the exploration of these phenomena (Maxwell, 2004). Using a qualitative approach in this study serves to illustrate how attention difficulties are perceived in the classroom, why and how these perceptions are derived, and how support is provided to learners thus identified. Moreover, this type of design enables one to gain an insider's (emic) perspective in the process of understanding and describing the phenomenon of children's attention difficulties (Cohen et al., 2005; Creswell, Hanson, Clark Plano, & Morales, 2007). Further, the Vygotskian theory

leads itself epistemologically and ontologically to a qualitative paradigm, as, the Vygotskian socio-cultural lens helps one to see meaning as co-created.

It should be noted that this research took place during the COVID-19 pandemic. For this reason, the methodology of the research had to be adapted to suit the current conditions. Hence, all interviews were conducted on Zoom Meeting Application to allow for no face-to-face contact.

3.3. Subjects And Context Of Study

3.3.1. Sampling

In order to conduct research, a group of people needs to be identified as a representation of the population that can be studied (Cohen et al., 2005; Kothari, 2004). Sampling is broadly defined as the process of selecting individuals to participate in a specific study (Cohen et al., 2005). Sampling is seen as an intricate part of qualitative research and there are various sampling types including non-probability sampling, probability sampling, purposive sampling, and random sampling (Cohen et al., 2005).

Non-probability sampling is often used within small-scale research and used to target a particular population (Cohen et al., 2005). Types of non-probability sampling include; convenience sampling, snowball sampling, quota sampling, and consecutive sampling. For this research, purposive sampling was chosen as it is done based on both the knowledge of the population and the purpose of the study, with particular characteristics being chosen which apply to the population of which the sample is representative. This research also includes convenience sampling.

3.3.1.1. Purposive sampling

Purposive sampling is also known as deliberate sampling, in which research participants are selected based on their particular characteristics (Cohen et al., 2005; Kothari, 2004). The participants chosen are also seen as representing the population as a whole (Kothari, 2004). Hence, they would be hand-picked for a specific reason. It should be noted that purposive sampling may introduce bias on the part of the researcher (Kothari, 2004). However, to acquire reliable results, researchers are expected to be impartial and make no judgments as well as use more than one data source (Kothari, 2004).

For this study, purposive sampling was chosen as it allowed me, the researcher, to conduct a study with a particular intention in the mind of the particular group of participants (Cohen et al., 2005). All the teachers chosen to make up the sample were assessed based on their role as Grade 1 teachers who had learners in their classes whom they perceived had attention difficulties. However, the assessment did not include or assume what type of support was needed for these learners, or should be rendered to them. This made the criteria for this selection specific, with a clear intention of unpacking how attention difficulties in the classroom were perceived by the teachers participating in the study. While attempting to use purposive sampling in this research, difficulties related to the COVID-19 pandemic arose in establishing a stable sample and this led to the use of convenience sampling.

3.3.1.2. Convenience sampling

Convenience sampling is also called opportunity sampling (Cohen et al., 2005). Participants are selected for this type of sampling based on their availability and accessibility at the time of the conducting of the research (Cohen et al., 2005). Convenience sampling is often used in case studies (Cohen et al., 2005). For this research, Grade 1 teachers were approached to participate in the research project.

3.3.2. Sample size

The sample size is a vital element in the research process (Cohen et al., 2005). The method and process of selecting an appropriate sample size is not a precise one, and is dependent on two main factors. Firstly, it depends on the purpose of the study and the population to be studied (Cohen et al., 2005). Secondly, it indicates the number of items, in this case, participants, that will be studied (Kothari, 2004). Naturally, the bigger the sample, the more reliable the results are likely to be and to allow for generalisations (Cohen et al., 2005; Onwuegbuzie & Leech, 2007). On the other hand, a smaller sample may lead to more in-depth results for richer data to be analysed within a qualitative study (Cohen et al., 2005). Thus, the chosen sample size for this particular research. In so saying, the sample is specific to the research and should allow for efficacy, reliability, representativeness, and flexibility (Kothari, 2004).

As the researcher, it is important to be realistic about the nature of the research and what it aims to achieve. Due to the nature of the study which involved looking at the perceptions and understandings of teachers regarding a particular phenomenon, I sampled six Grade 1 teachers who had experienced or were experiencing, or perceiving there to be, attention difficulties amongst some of the learners in their classrooms. The six Grade 1 teachers were selected from four different primary

schools in the Western Cape (two from the first school, two from the second school, one from the third school and one from the fourth school). In selecting the six teachers, the similarities and differences would be highlighted in their practices and pedagogy regarding the activities taking place in the classroom. Furthermore, providing these teachers with the opportunity for their perceptions to be unpacked in-depth would help the researcher gain a comprehensive understanding of these perceptions and the reasons for these.

As previously stated, the COVID-19 pandemic yielded difficulties in this particular research. For this reason, only six Grade 1 teachers were selected and available to participate. Further, it was not my intention in this research to generalise to a learner population; rather, I intended to collect thick data that could answer the research questions posed. As this study sought to develop a deep description of actual praxis in a classroom in regards to teachers' perceptions, the results cannot be generalised nor, indeed, is this the intention of the current study. This study is focused on understanding a phenomenon in depth, rather than on generalising to a wider population.

3.3.3. Population and study sample

Having a clear understanding of the population to be studied is essential to the sampling process as it provides a platform from which the sample can be chosen (Cohen et al., 2005). A population is described by Cohen et al. (2005) as a group of persons, objects, or items to be used to select a sample for a study. Furthermore, the sample population aims to select a portion of the group being studied to extract characteristics that seek to represent the general population (Cohen et al., 2005).

However, the goal may not always be to generalise the results to the whole population, in which case the results provide insights into a particular group of individuals or phenomena (Onwuegbuzie & Leech, 2007).

The population chosen for this study is Grade 1 teachers who have all qualified with a Bachelors in Education and only one of the six teachers completed her further studies in Special Needs Education as a post qualification and another who attends short courses to keep herself up to date with Barriers to Learning. All the teachers are currently working in public mainstream schools. At the time of the study, the teachers had varying numbers of years of experience in teaching, in particular teaching Grade 1, ranging from five years to sixteen years. All the teachers were female and were between 30 and 49 years old.

The sample was chosen from this particular population which itself was selected on the basis of attention difficulties as often being picked up in this stage of a child's schooling, based on my experience. In my experience one of the main reasons for attention difficulties presenting at this level is that in many, not all, schools, learners in Grade 1 are given little opportunity to move around in the way that they were used to doing in Grade R. Grade R is generally very "play-based" where learners do more kinaesthetic and concrete activities (Department of Basic Education, 2011). The shift to Grade 1 relies more on paper and pencil representations (Department of Basic Education, 2011). Sitting still for extended periods is a skill that Grade 1 learners need to develop and to which they are expected to adjust. Another factor that may influence learning in the Grade 1 classroom is the physical environment which includes constant noise (Naude & Meier, 2019). It could be for this reason that many of the referrals

include the fact that the learners cannot concentrate and complete the written tasks required by the curriculum within a noisy classroom.

3.3.4. Context of study

The research context in which this research takes place is the Cape Town metropolitan area of the Western Cape in South Africa. The focus of the research was on Grade 1 teachers in four public schools across middle-class to affluent areas. The schools comprised of 2 classes per grade, from Grade R to Grade 7, with roughly 30-35 learners per class.

3.4 . Research Methods

Research methods seek to explain the approaches used to collect the data for the study in order to explain and predict the phenomena being studied (Cohen et al., 2005; Kothari, 2004). As mentioned above, a qualitative approach was adopted to provide an insider's perspective, and this perspective inevitably influenced and dictated the choice of the methods employed for this study. The research method employed is the case study research method using interviews.

3.4.1. Case study method

Case studies are viewed as one of the more common methods for qualitative research, next to grounded theory (Creswell et al., 2007). A case study is described as an intensive examination of a real-life context in which multiple sources are taken into account within a bounded system (Cohen et al., 2005; Creswell et al., 2007; Yin,

1994). Using multiple sources of data collection and a specific context allows the researcher to build an in-depth understanding of the phenomenon or phenomena being studied and viewed as contextualised and comprehensive (Lewis & Ritchie, 2003). For this reason, the case study approach was chosen for the researcher to build a relationship between the phenomena and the environment (Kothari, 2004). Thus, drawing interpretations from the findings can lead to the transformation of the way in which the phenomenon is viewed, and to further research within the field (Kothari, 2004).

The case study method has both advantages and disadvantages. One of the advantages previously discussed above. This was that case studies can build a relationship between the phenomena and the environment (Kothari, 2004). Another advantage is the nature of the case study: comprehensive data is collected and interpreted from the context under study (Kothari, 2004).

On the other hand, a researcher is careful about generalising the findings from one case study, as the sample population is both limited and not randomly assigned (Kothari, 2004). The researcher needs to select cases that are seen to be representative of the sample population (Creswell et al., 2007). In this way, the researcher can draw on generalisations that allude to what can be learnt from the case study (Creswell et al., 2007). This current research does not seek to generalise findings, but rather to gain an in-depth understanding of a phenomenon.

While the possibility exists that the findings from this case study could be used in future to design quantitative study instruments, this is not the purpose of the current study.

For this study, the bounded system is considered the classroom context in which the teachers' perceptions of attention difficulties for referral were investigated. The focus was on occupational therapy support, such as assistive devices in the classroom and on referral for assessment. Furthermore, the study addressed how certain learners are or are not supported in and outside of the classroom concerning their attention difficulties. This study thus aimed to build a comprehensive view of the external support that is provided or not provided to these learners.

In many case studies, primary and secondary data are gathered in various forms and from sources which can include interviews, observations, artefacts, and documents from multiple sources (Creswell et al., 2007). However, due to COVID-19 pandemic restrictions, for this particular study, only interviews were conducted due to lack of access to school grounds. This is elaborated on in detail below.

3.4.2. Interviews

Interviews are a common source of information and data collection for case studies (Creswell et al., 2007). The interview provides a space for interaction between the researcher and the participant(s) to better understand the interviewee's world by using questions to guide the conversation (Cohen et al., 2005; Creswell et al., 2007). Furthermore, the interview is seen as a flexible tool for the researcher to gather information (Cohen et al., 2005). However, this kind of interview is not the same as an everyday conversation as the data collection interview has a specific purpose and, while flexibility may be allowed, interviewees provide answers to structured questions (Cohen et al., 2005). The open-ended questions allow for the interview to be flexible as these give the interviewer more leeway to explore and investigate the answers to

the structured questions (Cohen et al., 2005). Since the questions are open-ended, probes and prompts also allow for follow-up (Cohen et al., 2005).

In the current study, the interview was used as a crucial tool to understand how the participating teachers both view and approach attention difficulties. The questions posed looked for, for example, how these teachers saw attention difficulties in the classroom and how they managed these. The questions asked in the interview sought to provide an answer to the research question. Thus, all the questions were built around the research question and subsequent sub-questions.

According to Cohen et al. (2005), mutual trust needs to be established between the interviewer and interviewee during the interview. During the entire course of the different interviews, the interviewer needs to remain objective, or consciously avoid bias, and the questions need to be consistent and systematic across the different interviews (Cohen et al., 2005; Kothari, 2004). Interviews can include a high degree of subjectivity, and an additional barrier to objectivity could be that the interviewee is not entirely open and honest (Cohen et al., 2005). There may be various reasons why the interviewee would not be entirely honest: they may be intimidated for different reasons or may be uncomfortable with sharing the truth, or apprehensive, fearing the outcome of their honesty. Thus, the interviewer needs to develop and maintain a comfortable relationship with the interviewee to allow them to feel comfortable enough to share information with openness and honesty (Cohen et al., 2005; Kothari, 2004). In this study, care was taken to make each participant feel comfortable sharing their responses with the researcher. One mechanism I used was a disclosure of my own interest as an OT in teachers' understanding of attention difficulties, with the purpose

of research findings being of assistance to them with coping with learners with attention difficulties.

At the same time, it is crucial to keep in mind that interviews can bring about meaningful and exciting results. These results are often seen when the interviewer becomes an active listener during the interview and listens to fully understand the interviewee (Kothari, 2004). The interviewer needs to remain aware of, and attentive to, an interviewee's body language, tone and responses in order to sense when the interviewee may feel judged (Kothari, 2004).

The interviews for this study took on a structured conversational approach which lasted between 60 to 90 minutes at a time. The pre-set open-ended questions were asked, and, depending on the nature of the responses, elaboration or clarification of the response was requested. The questions posed were intended to provide the structure for each interview with the kind of conversational approach that allows for flexibility during the interview. All the interviews were conducted one-on-one via an online platform, Zoom Meeting Application, and were recorded with the consent of the teachers. My reasons for this social distance, which is not ideal for interviewing a participant, arose from the challenges of movement and face-to-face interactions imposed by COVID-19 restrictions. Ideally, I do feel that meeting with the teachers in person would have been much better for ease of the interview. However, I do not feel that the Zoom Meeting Application impacted the results in any way as the teachers were fairly comfortable in sharing responses.

3.5. Methods of Data Analysis

This section entails 'making sense' of the data collected (Cohen et al., 2005). For the data analysis process to run efficiently, and in such a way as to strengthen the validity of the research, the researcher must be organised and prepared for each step in the process (Kothari, 2004). It should be noted that, while the group of teachers do not represent the entire research population, I argue that the results of this study are nevertheless relevant in terms of shedding light on teachers' perceptions with regard to inattentive behaviour.

For qualitative research, the researcher analyses the data throughout the study to narrow down key aspects and to describe and identify trends (Cohen et al., 2005; Lewis & Ritchie, 2003). Furthermore, it is of utmost importance that the researcher is clear about what the analysis needs to accomplish (Cohen et al., 2005). For example, whether its purpose is to discover, explore, portray, raise issues or describe (Cohen et al., 2005). Hence, knowing this will determine how the analysis may be formulated or configured (Cohen et al., 2005). For this particular study, the data were used to write a descriptive narrative that speaks to the interviews' findings. A narrative approach often characterises case studies (Cohen et al., 2005).

The researcher used a thematic approach to analyse the data. A thematic approach entails developing themes and putting them into various categories based on the available evidence (Cohen et al., 2005). The thematic analysis for this study was done by picking up trends based on the available evidence from the interviews, and at all stages keeping the research question in mind. For this research, the process entailed the recording and transcribing of all interviews conducted. The next step in the analysis was to read through the transcription and re-listen to the interviews to identify common

trends from what the teachers reported and/or discussed in the process of answering the interview questions. During the process of reading through the transcriptions, I used different colour pens to highlight codes that spoke to the research question, and to each of the sub-questions posed at the beginning of the research. While listening to the recordings of the interviews, notes were taken throughout to cluster the evidence together into themes that made meaning in terms of the research question.

By developing themes, a researcher is able to understand the trends emerging from the collected data, and the reasons for the way a situation or phenomenon studied manifests or develops in a particular way or ways (Cohen et al., 2005). For instance, the discovery of certain common characteristics exhibited by teachers who refer to learners, or describe them as, as having attention difficulties and needing to be referred to an OT for additional support. Furthermore, the development of themes provides the researcher with the opportunity to draw conclusions based on both the similarities and differences shown in the results.

Each teacher was provided with an abbreviated pseudonym such as 'AF' and 'CB' to protect the anonymity of the participating teachers. The following abbreviated pseudonyms were used; 'AF', 'CB', 'JVN', 'IM', 'CK' and 'IS'.

3.6. Ethics

Considering ethics in research is vital in maintaining sound and appropriate research (Cohen et al., 2005). Qualitative research such as that undertaken for the present study encompasses the direct interaction between the researcher and the

participants. Thus, ethical standards must be maintained throughout the process whilst at the same time collecting reliable and valid data.

The ethical principles that were considered for this study include non-maleficence, autonomy, confidentiality, and justice. Firstly, non-maleficence refers to no harm being inflicted, which means that the interests of the participants are kept in mind for their protection at all times (Cohen et al., 2005). Secondly, autonomy refers to the rights of the participants to share information at their discretion (Cohen et al., 2005). Thirdly, confidentiality refers to protecting the data collected from the participants in the sense of not sharing participants' information outside of the research context and keeping the recorded data in a secure place (Cohen et al., 2005). All information disclosed by the participants was intended to be kept anonymous in the research findings to protect the identities of the participants. Finally, justice speaks to the fairness and integrity of the research (Cohen et al., 2005).

Before embarking on the research, I shared my proposal with my supervisor and was granted ethical clearance by the University of Cape Town Ethics Committee, which meant that permission for this research study was approved (reference number: EDNREC20200201). The Western Cape Department of Education also gave ethical clearance (reference number 20200220-4734) to conduct this research at the four schools.

Informed consent was obtained from all the teachers interviewed. The informed consent asked for participants to provide consent for interviews to be recorded. In addition to the informed consent form to be completed by the participants, participants were provided with an information sheet that specified the nature and purpose of the research in the hopes of providing participants with an appropriate background to the

research. It was vital to highlight that participation in the research study was voluntary and that participants' identities would be kept confidential and that they were free to withdraw at any stage without prejudice. The researcher thanked participants for their participation and emphasised that there would be no remuneration of any sort.

3.7. Conclusion

In conclusion, this chapter highlighted and detailed the research design, and methods used for this study as well as providing a rationale and description of the data analysis. The use of a case study method allows for the researcher to gain an in-depth understanding of teachers' perceptions of attention difficulties in the classroom through the use of interviews with open-ended questions. The use of a smaller sample allowed for the researcher to unpack discussions in the interviews bearing in mind key ethical considerations such as non-maleficence, autonomy and confidentiality. The chapter to follow will unpack the findings gained from the six interviews conducted.

CHAPTER 4

Data Analysis

4.1. Introduction

This chapter describes the analysis of the data from the interviews conducted, together with the research findings related to the research questions on which the study is based. The collected data were explored, examined, and interpreted in order to obtain an in-depth understanding of the study participant teachers' perceptions – and the reasons for them forming these perceptions - of their learners' attention difficulties in their Grade 1 classrooms. These were perceptions which came into play when these teachers identified certain learners as having these difficulties, and referred them for occupational therapy support. The data also revealed the various ways in which these teachers managed and taught the learners they perceived as having attention difficulties.

As previously described in the methodology chapter, in order to make sense of all the data collected, specific themes were identified that the researcher considered describe and highlight the trends picked up from the study. The development of these themes was done inductively by listening to the recordings from the interviews and reading the transcripts thoroughly. Through this process, common trends were picked up based on the responses provided by the teachers participating in this study. This allowed for the emergence of the eight themes related to the research question. These included;

- Indicators of attention difficulties as perceived by participating teachers
- Frequency of attention difficulties in the school population
- Reasons for behaviours experienced by participating teachers

- Teachers feelings towards the perceived attention difficulties
- Parental challenges faced by participating teachers
- School resources available
- Therapy support
- Pedagogic styles

4.2. Indicators of Attention Difficulties as Perceived by Participating Teachers

The participating teachers were asked to share their experiences of the learners behaviours observed in the classroom that they considered could be described as indicators of attention difficulties. Although each teacher provided differences in their accounts of their observations and perceptions of this behaviour, many similarities emerged in these accounts. The experiences reported by these teachers of attention difficulties in their classrooms appeared to be quite apparent across the interviews. All the teachers were able to reflect on a particular learner(s) in their class or from the past who presented with what they perceived were attention difficulties – with not all cases being formally diagnosed as ADHD.

4.2.1. Indicator 1: Concentration difficulties as a characteristic of attention difficulties

A central indicator for ADHD mentioned by teachers was difficulty concentrating manifested by the child being easily distracted, as illustrated in the extract below:

Extract 1: Concentration difficulties as an indicator of attention difficulties

AF: "Extremely difficult to concentrate but also very easily distracted by any external stimuli.... Pencils falling on the floor, things like that. Anything that is

sound related, he is easily distracted by. Also, short attention span in terms of being able to sit for a lesson of 10 minutes. By minute number two, he lost concentration already and ... he drifts off and daydreams."

Another teacher commented on similar behaviours she observed in the classroom in the extract below;

Extract 2: Concentration difficulties as an indicator of attention difficulties

CK: "The one whose attention span is so short, then after 5 minutes he is busy with something else, or interfering with another child, or fidgeting."

As noted above, the characteristic of having a short attention span was highlighted by two of the teachers as indicators of attention difficulties. This was also mentioned by two of the other teachers, who used terms such as "easily distracted", "not sitting still", and "very restless". Thus, concentration difficulties characterised by a short attention span, distraction and fidgety movements were used as indicators for ADHD by these teachers.

4.2.2. Indicator 2: Untidy and incomplete work as characteristics of attention difficulties

Children with ADHD often present extremely untidy work as they struggle to write neatly for various reasons. This is picked up in the data by teachers indicating that with children whom these teachers perceive to have ADHD present untidy work and their processing skills are slower than those of a neurotypical child's inability to finish tasks. This is illustrated by CB in extract 3 below;

Extract 3: Untidy and incomplete work as characteristics of attention difficulties

CB: ".. untidy presentation of their work, unable to complete tasks by themselves."

The above quote from CB highlights the difficulties Grade 1 learners have with completing tasks independently as teachers understand their attention difficulty. This was further mentioned by IS, who elaborated on this difficulty;

Extract 4: Short attention span in completing tasks

IS: "Obviously, children at their age, 6, 7 years old, their attention span is shortened, but with some learners, small tasks- they can't complete it within the timeframe given, or we have to break up tasks for them to make it even smaller timeframes."

This highlights the difficulty with completing tasks within a given timeframe as a very high indication of attention difficulties. As IS elaborates on this, she further acknowledged the age of the learners as being a factor for difficulties experienced, yet, some learners still struggle and need even more support. A similar account was provided by CK in extract 5;

Extract 5: Learners who are not able to keep up in the classroom

CK: "And you also get those who you know they can't keep up with you, and then those you need to give them little bits of input because that is all that they can manage."

In reporting their perceptions, the participating teachers use the completion of tasks as an indicator of attention difficulties. What they are alluding to is learners being

unable to complete the tasks independently, and for this reason, end up with incomplete work. This was mentioned by AF in the quote below.

Extract 6: Learners who are not able to keep up in the classroom

AF: "But it is more often when they are on their own in their desks. And it is usually at a time when I am busy.. I am there and I am present but my full attention is not on them. So they are meant to be doing their own work independently and I am doing a group on the mat and that is where I find most of my children with attention difficulties struggle."

As AF describes, the learners cannot complete tasks independently or when her attention is not on them. This is an indication of the connection that teachers make with linking the difficulty in completing tasks independently to attention difficulties.

4.2.3. Indicator 3: Following instructions as a characteristic of attention difficulties

Another indicator of attention difficulties for teachers in this sample is the inability to follow instructions. This is in fact a key indicator of ADHD (Orban, Rapport, Friedman, Eckrich, & Kofler, 2018). Children who have ADHD and attention difficulties do find it difficult to follow instructions, particularly when they are given more than one instruction at a time. For example, a teacher might say, 'Open your book and turn to page 42. Now do numbers 1 to 5 on page 42.' The child with attention difficulties may only process one part of the instruction, such as 'open your book' and miss out on the rest, and would need further assistance in completing the rest of the instructions. This was highlighted by extract 7 below;

Extract 7: Following instructions

JVN: "Okay so it's basically things like not following instruction, or delayed following instruction. When they notice everyone else has gone to fetch their book, for instance, then they will go and do it. Not completing their work is a major thing. Daydreaming. Changing the topic when you are having a group discussion and somebody comes up with something completely different to what you were talking about."

4.2.4. Indicator 4: Frustration leads to aggression- The affective side of attention difficulties

A final indicator of attention difficulties mentioned by these teachers was a child's tendency towards aggression. In my professional capacity, I note here that the child with attention difficulties is not naturally aggressive, but s/he can become frustrated when trying to follow instructions and complete work, and finding difficulty in doing so, resulting in behaviour that presents as aggressive. This is highlighted in extract 8 below;

Extract 8: Frustration leads to aggression- The affective side of ADHD

CB: "The latent signs are the one who only pick up when the child is in the older grades, but these children are more aggressive, become frustrated really easily with themselves. So, they are more behavioural and emotional than the more obvious signs."

4.2. Frequency of Attention Difficulties in the School Population

Across all the interviews conducted, each teacher was able to reflect on an experience she had of a learner in the classroom who had been formally diagnosed

with ADHD over their years of teaching. Certain cases had been highlighted by the teacher as they were awaiting assessment for a formal diagnosis. However, not all the teachers were able to reflect on a learner, currently – at the time of this study - in their classroom, with a formal diagnosis of ADHD, although they indicated that they did have a learner whom they perceived to have attention difficulties. It should be noted that, at the time of this study, not all the schools were able to access assessments for the learners they were concerned about regarding a formal diagnosis for ADHD. Thus, this is not to assume that there were/are no formal diagnoses of ADHD in the classrooms. Most of the learners discussed in the interviews were referred to by the participating teachers as learners with 'attention difficulties'. It appeared that the frequency of learners with attention difficulties were high, and each teacher had a handful in their class at any given time. Many of the experiences described by the participating teachers were similar to the one shared below by CB;

Extract 9: Frequency of attention difficulties in the school population

CB: "I think about one year when I had nine children in my class who had attention difficulties. Thank goodness they were separated the next year so that it would be easier for the teacher to manage.... But I generally always have a handful of children each year who have attention difficulties."

CB and the other teachers interviewed noted that there are always learners with attention difficulties in their classrooms each year. Hence, this is not a new thing that teachers need to manage or familiarise themselves with. For this reason, throughout the interviews, it appeared easy for the participating teachers to reflect on their experiences of learners in their classrooms whom they perceived to have attention difficulties.

4.3. Reasons for Behaviours Experienced by Participating Teachers

During the interview process, the teachers were asked about what they thought were the reasons for the attention difficulties they observed in their classrooms. This spoke to the teachers' understanding of the behaviours, and the causes of these behaviours, in their classrooms. The teachers listed various reasons for these behaviours, categorising them into three aspects; the learner, the classroom and the home.

4.3.1. The Learner

Regarding the learner, many of the participating teachers took into consideration the learner's age and how this could affect their attention span when considering whether to get a possible diagnosis or not. One teacher spoke about the expectations placed on the learners in the classroom by both teacher and the curriculum, and how they are not ready to fulfil these because of their age.

Extract 10: The learner and their attention difficulties

JVN: "...sometimes you need to push and be more firm in redirecting attention but also, I am very aware that you can't force this at this stage in Grade 1 where everything is- this formal education is new to them. You can't force a child to pay attention. They need to be interested and need to actually want to learn... I must get done with the curriculum and there are certain requirements that must be done and ways that things must be done. But I do understand that that's where they are until they grow and mature into a more formal learning environment."

Another teacher shared a similar view in extract 11 below;

Extract 11: The learner and their attention difficulties

AF: "Their concentration spans- they are only seven years old. Their concentration spans are quite short. But for the average child, who can sit for maybe five to seven minutes and concentrate in a lesson, even if there are visuals, everything- the learners that do have attention issues are the ones who usually fidget or they zone out and start daydreaming."

This leaves both JVN and AF, and other teachers of young children, in a difficult situation as, on the one hand they are aware that their six or seven year old learners are just not ready for what is expected of them, yet, they still have expectations placed on them by teachers, and by the curriculum, to perform. There is a huge contradiction here between having to develop a child cognitively versus curriculum coverage. Unfortunately. Often what happens is that the curriculum is covered at the expense of full development of the child. This is something that JVN, in particular, felt very passionate about. JVN and two other teachers were able to acknowledge that, because the learners are young, they all have short attention spans and, for this reason, have difficulty sitting still for long periods. Thus, making it even more difficult for a learner with attention difficulties to sit still for this long. As a result, those young children who struggle more with attention difficulties miss out on more as their attention is elsewhere instead of where the teacher needs it to be. These teachers also highlighted that the learners' maturity levels need to be taken into consideration and that many of them are not used to the formal schooling environment. For a learner to

learn, they need to be given the opportunity and time to grow and mature. This process is often something that the teachers see develop throughout the year.

4.3.2. The Classroom Environment

Moving onto the classroom environment and the structure in the classroom, this appeared, according to the participating teachers' experiences and perceptions, to play a big role in attention difficulties for various reasons, including; class size and the type of learning taking place. Even with neurotypical children, large class sizes are difficult for teachers to manage (Bahanshal, 2013). The challenges of teaching large classes with children with attention difficulties present or who have been diagnosed with ADHD are even greater.

AF described her experience with a big class size with regards to giving equal attention to all learners in the classroom;

Extract 12: Large classes impact on attention difficulties

AF: "You know, the problem is that when you have a class of 36, it is so difficult to hone in on one child. So say for instance there are six children with attention difficulties in your class, sometimes it works for four but it doesn't work for two, you understand?"

As AF describes, a big class size with many learners in the classroom with different needs is very difficult to manage, both from a teaching perspective and from providing intervention. This appeared to be a shared experience amongst many of the teachers interviewed. In the interviews they shared their difficulties in providing support to the learners in need, especially those who struggle with attention. Furthermore, the

teachers interviewed expressed difficulty sharing their attention with the learners. One of the teachers provides an example of this in the extract below:

Extract 13: Learners seeking teacher's attention

CB: "They are often the bully and bully the other children so that things can be done their way. Very much seeking attention all the time. Probably why they are bullies as well because in a way, it is their way of getting my attention. It may not be the best way to get my attention, but it happens. Almost like their cry for help."

CB's experience shows how some learners try to get the teacher's attention, but they may not always do so in the most appropriate ways. This, often aggressive behaviour, is then linked to having an attention difficulty. What is more, many of the interviewed teachers highlighted learners showing difficulty in working independently based on the type of work. As mentioned above, the learners had difficulty maintaining attention on the learning task when the teacher did not have her attention on them. This was expanded upon by CB in extract 14:

Extract 14: Grabbing and holding attention in the classroom

CB: "When we are on the mat, it is much easier to grab their attention. This often happens in small groups so I can pay more attention to each of them. But when they are at their desks, the attention does seem to fade a bit faster. Especially if I am not there to watch what is happening with their work that they are meant to be doing when at the desk."

This experience was not unique to this classroom, as shown below by AF;

Extract 15: Grabbing and holding attention in the classroom

AF: "I definitely see it mostly when they are alone at their tables. Less often when they are on the mat. Of course, there are instances when they are on the mat. But it is more often when they are on their own in their desks. And it is usually at a time when I am busy... I am there and I am present but my full attention is not on them. So they are meant to [be] doing work independently and I am doing a group on the mat, and that is where I find most of my children with attention difficulties struggle."

Both these teachers refer to their learners' difficulties when left to do work independently. Thus, these learners require the constant attention of the teacher and this is not always possible. This could be because the type of work done on the mat is more engaging than the independent work. The work done on the mat is used as the teacher teaching time and is done on a concrete level which holds learners' attention for longer. Then this needs to be then translated independently into their books, where learners need to sit at their tables. This speaks to the learners' level of interest and their ability to work independently.

4.3.3. The Home

Many of the teachers interviewed mentioned the importance of the home environment and its influence on learners' ability to sustain attention in class. IS noted the vital role that the home environment plays on the development of the learner;

Extract 16: The home and attention difficulties

IS: "Everything you learn starts from home. Small things like when a parent doesn't give a child attention. From birth, you teach your child to complete certain tasks. Obviously, there are difficulties when children have certain difficulties like a barrier to learning that's specific like ADHD. But I mean

generally, I feel like they don't teach their child how to be patient. I feel like our parents give too much instant gratification. So you are teaching yourself that there is no need to wait. Everything you want will be immediate."

IS shared her experiences in the classroom when her learners expect the teacher to respond immediately, which is not possible in a classroom setting. As highlighted above, this is seen by teachers such as IS as behaviour that is learnt from the parents at home, but appears to have negative effects in the classroom as the teacher cannot provide the learner with the immediate attention that they seek and to which they are accustomed. It was further highlighted that the learners come from homes where structure and routine is not in place, which teachers such as IS saw as affecting the learner when they come to school.

CB shared her views on the circumstances of the home environment and its role in attention in extract 17 below;

Extract 17: Circumstances of the home environment on attention

CB: "Some of the children come from divorced families. This means that they spend one weekend with their mom and the other weekend with their dad. This obviously causes a lot of disruption for them and the start of their week is really bad. I struggle a lot with getting them to focus and feel settled to work."

However, another reason related to the learners' home backgrounds influencing learners having difficulty with attention in the classroom. As noted by CB, these learners come from homes that may unsettle them. This makes it difficult for the learners to come into the classroom with its routine and structure as they have other things on their minds and some are just not used to this classroom environment.

Overall, the abovementioned points suggest that there is so much more behind the perceived attention difficulties than meets the eye, and so much more that we see at face value. The points raised by the participating teachers are all valid points regarding possible underlying reasons for these perceived attention difficulties and which consequently affect the support provided. Manifestation of attention difficulties are often the learners' way of asking for help as they may not have the correct words to express this, nor understand what they need. The responsibility then falls on the teacher to provide the learner with the appropriate support to meet their needs. Like this teacher, several of the other teachers supported this sentiment and showed empathy for their learners.

4.4. Teachers Feelings Towards the Perceived Attention Difficulties

Throughout the interviews the six teachers expressed shared feelings, as well as experiences that were unique to teachers dependent on whether or not they had an OT on-site at their school or not. All six of the teachers experienced a shared feeling of being stressed and under great pressure due to time constraints and the demands of the curriculum. However, when it came to support and intervention, the four teachers with no OT on-site felt lost and more unsupported than the two teachers who were fortunate to have an OT on-site. This is discussed in more detail below.

Feelings of being stressed out and under pressure were highlighted by each of the teachers during the interviews. Take, for example, AF when asked about providing support to the learners in class;

Extract 18: The pressures teachers face

AF: "Time constraints is the biggest issue there because you are not always able to do it because there is so many other things that need to be done in a day, so you lose yourself in that way."

This feeling of being extremely stressed described by AF was similar to that reported by JVN, as shown in the extract below when asked about providing intervention in the classroom;

Extract 19: The pressures teachers face

JVN: "Unfortunately, you get a bit stressed because you've got the curriculum to complete and then you have time constraints within the school day."

The above two extracts demonstrate the immense stress under which these teachers are, and which makes it very difficult to provide adequate or any support even when they are aware that support is needed for these learners. These stressors included completing the curriculum, other activities that take place during the school day, and the administrative tasks required to be completed. As a result, these teachers feel very despondent and ineffective in their practice. One of the teachers shared her feelings of despair below;

Extract 20: Teachers attempt to accommodate learners despite feeling stressed

JVN: "I try to think and consider that, you know, the classroom is so diverse and we have children from diverse backgrounds and the diverse skills [needed] to cope within the classroom environment. I try to consider that, and accommodate that, and be understanding of that. Unfortunately, you get a bit stressed because you've got the curriculum to complete and then you have time constraints within the school day, so it is not always possible."

This sentiment was shared amongst all six teachers and further elaborated on by JVN in a statement showing how conflicted she felt by what was expected of them to fulfil versus what they thought their learners needed in that space.

Extract 21: Teachers struggle with conformity

JVN: "You are forcing them to conform and be that structured individual where their brains are maybe not working like that. And part of me wants to say, 'Just let them be who they are'... part of my heart feels, but why do we do this because we can still learn in other ways. We don't have to be so strict and structured. They are still young and little you know."

This statement was made with great passion, and one could feel the teacher's genuine concern coming through. The expectations placed on the learners to conform plays a role in their learning ability in the classroom as the structure is not what they are used to. This results in the teachers having to put in considerable effort to help the learners adjust to the routine and structure, as previously discussed, in relation to the behaviours observed.

However, stress was not the strongest feeling felt by the teachers. The four teachers who expressed feelings of being lost and unsupported made them appear to be struggling more than those who are able to rely on support structures in their school and on colleagues to help them identify and understand the behaviours observed in the classroom. The teachers were asked to elaborate on their identifying those learners whom they thought needed additional intervention. The teachers demonstrated a clear reliance on using their past experiences and their "gut" feeling to help them identify the behaviours they observed which they saw as being linked to attention difficulties. Only one of the teachers had been formally trained in special

needs education, which aided her in understanding the learners and their behaviour in her classroom. In the context of lacking support the teachers shared this information openly, as shown below;

Extract 22: Teachers reliance on their gut feeling

CB: "I had to figure it all out by myself and use my own knowledge to help the kids in my class.... For me, identifying these learners are very much gut-orientated."

CB elaborated on the above, reporting that much of her support and identification comes from past experiences of learners who presented similarly in the past. This response was shared amongst many of the teachers as they too reported relying on past experience, as demonstrated by IS, who shared her method of identifying learners with behavioural problems in the classroom:

Extract 23: Teachers use of experience

IS: "When you become a teacher, you begin to read children. So when a child walks into my class already we can suss them out...so the first thing I do is we greet and then we play a game and they introduce themselves. And then immediately, then, I can see who concentrates, who is actually listening to the others. And I always ask them questions.... You know, it is very difficult to figure it out. You need to obviously check for the indicators but you also need to use your intuition to decipher if the child is inattentive or is there an underlying issue."

IS is again highlighting how experience is used to aid her in identifying which learners need support and those who can cope independently. Admittedly, experience is a useful tool to use in the real world as one learns from past experiences. This is

where teachers feel unsupported and lost in terms of how to identify learners and provide support. Much of the time, the teachers are left to their own devices and expected to support their learners in the classroom based on experiences, and with a lack of training in behavioural problems.

However, IS further highlighted the inadequacy of her experience and her lack of training in her classroom after both her and the mother of one of the learners in her class tried everything to support this learner, without making any progress:

Extract 24: Teachers making sense of inattention

IS: "Here you are thinking that this child is inattentive the whole time, but actually it was his hearing. So luckily in Grade 1 we were able to figure it out because imagine this child went throughout his schooling career having this hearing problem but not knowing it. But I just did not know what I was looking at."

This account of a learner in IS's classroom who appeared to her to have attention difficulties indicates her lack of training in identifying cause of perceived attention difficulties. Eventually, the teacher found out that the learner had only 20% hearing in one ear and was profoundly deaf in the other ear. However, due to her lack of expertise in hearing loss, she incorrectly identified his observed behaviour. All his behaviours pointed to attention difficulties, which was how this problem was addressed. However, the child had a hearing deficit and not an attention deficit. Now, she reports that she makes sure that all the learners in her class have their ears and eyes assessed, which she would not have done without this prior experience. This illustrates that there is a place for experience when it comes to identifying the cause of perceived behavioural problems. As this teacher did not have expert knowledge, she did not know how she

needed to proceed. Teachers are left to create their own guidelines and protocols based on their experiences with previous learners rather than on expert professional advice and support. Hence, this brings into question how teachers are identifying the various behavioural problems of young learners in particular, as this affects how they provide support to their learners, as demonstrated in the above example.

It became apparent in the course of the interviews that the teachers felt empathy towards the learners and the difficulties that they experienced. Take, for example, this extract from an interview which was shared when asked about their feelings towards these perceived attention difficulties;

Extract 25: Teachers empathising with the learner

CK: "It's very real and I do understand that the children do struggle. And I just have to go over things again because it is not easy as an adult when you do not understand something, so [for] a child who is learning something for the first time, it is even more difficult."

The immediate response of CK to any perceived attention difficulty was to empathise with the learner in the classroom by highlighting the difficulties that may be experienced by a learner during her response. The above extract speaks to the learners learning something for the first time. The empathy felt by the teachers helped them to understand the learners on a deeper level, as described below by JVN;

Extract 26: A deeper understanding of the learner

JVN:" In many cases, it is not that their attention is ... no, that their attention is not by me, but it elsewhere. You know, they are focused on something else as opposed to focusing on the lesson. Some of them are quite focused on something else."

JVN acknowledged that a learner who can pay attention to something that s/he is not meant to then could focus. This deeper understanding of the observed behaviours helps the teachers to unpack further why the attention difficulties are manifesting, which made it evident that these teachers had a more sensitive understanding that went deeper than what was observed at face value.

4.5. Parental Challenges Faced by Participating Teachers

There were three main challenges highlighted by the interviewed teachers with regards to the parents. The first was denial on the part of parents, the second was the lack of parental support in the home, and the third was parents being unable to access additional support services for their children due to financial constraints.

Starting with denial from parents, the teachers often noted that the parents were not always ready to admit that their child needed additional support. One of the teachers went as far as to describe the denial of parents as one of her greatest challenges :

Extract 27: Parents in denial

CK: "It is not so much them (the learners) but parents are in denial. I find that if I get the cooperation from the parents then it is much easier... Listening and following through on your advice, like saying that your child needs a routine at home and not let them go to bed watching TV. Rather, read them a story... But the difficulty is saying it in a way that doesn't offend them. You understand where they are coming from, but you just want to help them."

As described by CK above, when a parent is in denial about what is observed in the classroom, and what is picked up from the home environment, it makes it very difficult for the teacher and puts them in an awkward position. CB supported the above statement:

Extract 28: Parents in denial hindering support

CB: "I had to deal with a lot of parents who were in denial about their child having these (attention) difficulties. You know, they see it as you saying that there is something wrong with their child and you trying to provide support to their child."

As CB explains, the parents do not always consider where the teacher is coming from. Much of what is said by the teacher is taken out of context and taken personally. As much as the teacher may understand where the parent is coming from, their intentions may not be perceived in the same way by the parents. This makes it difficult for the teacher to engage with the parents and support the child appropriately. As a result, there is increased pressure placed on the teacher to assist the learner in the classroom, and again, teachers feel alone and despondent in their efforts to support a child. However, it is also important to note that a learner may not cooperate with the support being offered if parental consent is not provided, leaving the teachers feeling powerless.

The second challenge faced was the lack of parental support provided in the home. This challenge came up across all the interviews. Four of the teachers interviewed noted the absence of parental support and the negative effects this had on a learner's progress. Many teachers found that support needed to be provided in the home that

aligned with what was being offered in the classroom. This included giving parents tips and activities that would reinforce what was learnt in the classroom.

Extract 29: Challenge of parents being busy

JVN: "We meet the parents, especially [of] those who are struggling and need further support. Sometimes, it does not always work because we find that the parents are not willing to do as much as we like them to do because of their home circumstances - you know, they are working."

As JVN reports, there are reasons why the parents cannot support the learners in the home environment identified as having attention difficulties. As a result, the this teacher needed to do education training with the parents regarding attention difficulties, and explain why this type of support was needed in the home with the learner and how to do this at home. Learners' home circumstances were further discussed by IS as shown below:

Extract 30: Lack of parental involvement

IS: "And also obviously, the parents not being in the child's life. Many of our kids are raised by their grandparents, so also, they don't have time. They are pension age so you can't blame them. For me, that's why so many of our learners are in the situation that they are in, and struggling."

As described by IS, many of the learners come from homes where the parents are not involved with their children, and those at home may not be able to help them in the way they need, thus, placing these children at a disadvantage.

The third challenge to learners getting adequate support was that of financial constraints. In the interviews, the teachers were asked how they access additional

support for the learners. Sadly, many of the teachers expressed how difficult it is to access support for their learners. CB described her experience with attempting a referral in order to obtain support:

Extract 31: Parent financial constraints

CB: "As most of our parents may not be able to afford the private route, we refer to the department of health or education. But all the red tape that we have to go through with the department to get our children assessed makes it difficult. Often, our children just fall through the cracks because we refer a child and only two years later, is the child assessed."

As noted by CB, support is not easily accessible for various reasons. The first is parents not being able to afford private OT services, and the second is that securing government services, such as those from the Department of Education, is a lengthy process and the identified learners then get left behind during the lengthy period they have to wait for this support.

4.6. School Resources Available

Along with the teachers having to rely on their experiences, the teachers reported frustration levels due to their not always being sure whether what they were doing was appropriate for the difficulties they perceived, or identified a learner, or learners, to be experiencing. This was particularly so if the support they provided to the identified learner was not proving to be effective in improving the learners' academics and behaviour. In this context, some of the teachers noted that their schools have functional School-Based Support Teams (SBSTs) that can assist the teacher with appropriately identifying these learners and providing them with the support.

Extract 32: Support provided from the school:

JVN: "If I have a child that I feel we need to flag, then we set up a meeting, then we will discuss the child, then they will give some pointers to help to redirect them and to manage them in the classroom, and they will also help with monitoring. We have a special teacher who will assist with that. We monitor and assess, and then they will help with speaking to the parent and then making the referral. Or recommend an assessment if need be. We try to do that as early as possible."

The SBST playing a vital role in supporting the teachers was echoed by TM in the extract below:

Extract 33: Support provided from the school

TM: "After my observations and suspicion of a possible difficulty, I consult the school's learning support team and recommend an assessment to the parents of the child."

The School-Based Support Team assists the teacher with providing support in the classroom and with facilitating external referrals that may be more beneficial to the learner. However, if the SBST is not functional at a school, the teacher is often left to fend for themselves. Two of the teachers noted that they refer the learner to the learning support teacher at the school, and she then takes the matter further. Whereas with the school where JVN is based, the class teacher is included in the support plan's moving forward to monitor progress and support the SBST.

In addition to the SBST, AF noted that she seeks support from her more experienced colleagues as described in the extract below:

Extract 34: Teacher seeking help from colleagues

AF: "But I also ask a lot of advice from people- older colleagues."

AF uses her colleagues as tools of support when she is unsure of what she has observed in the classroom in terms of a learner, or learners, having attention difficulties as they have more experience with this behavioural problem than she does. The teachers rely on one other, especially on more experienced teachers who may have previously had a particular learner in their class, or a teacher who may provide advice on how to provide the support to the identified learner.

Furthermore, two of the teachers (JVN and CK) from the same school noted that they also have an occupational therapist who can help them identify and support those learners in the classroom about whom they may be concerned . CK also explained the benefit of having an OT as a resource at the school in the extract below:

Extract 35: OT support at school

CK: "The OT comes in then I would sit down with my observation notes and I will be writing down a lot of stuff, just watching. Maybe stuff I would not usually observe it catch when I am doing it."

The benefit of having an OT and other resources at the school allows the teacher to see the learners in a different light, in a way that she may not have been able to see had she been in the classroom with the same learners. This situation and its advantages are unpacked in greater detail later. In addition to OT support, JVN was fortunate enough to access other support at her school, that has been outsourced, due to the lack of departmental support as described below in extract 36;

Extract 36: Accessing support from the Department of Education

JVN: "With the department we wait too long. And we understand [it is] because they are inundated with cases and we have had a few through the department but it's not quick and immediate... so we have a good relationship with both the OT and psychologist."

In the above extract, JVN refers to the private OT and psychologist with whom the school has built a relationship over the years. This relationship has proven to be more effective for them as a school and as a staff, as they have more regular and reliable access to the services. In addition, it appears that many of the teachers interviewed also found the process of the Department of Education to slow everything down rather than provide urgent support to the learner. For this reason, the teachers refrain from making referrals to the department due to previous experiences of the lengthy process. Public schools are expected by the department to access public support, but the 'red tape' associated with referring a learner to the department makes it extremely difficult for a learner to access the support they need. Thus, by the time the learner is seen for support, the learner has already been struggling for a long time. This referral process, SIAS, is a process which teachers embark upon to request specialist support once they have attempted to support the learner in the classroom. However, there is a negative association placed on SIAS because the teachers do not view it as effective in reaching the learners that need the support. Unfortunately, taking all of these factors and unsatisfactory procedures for the provision of support in account, the reality of what is currently taking place in terms of support provision within the schools and the system of 'inclusive education' is dismaying. This system, as described above, has made many teachers, apart from the six participating in this study, feel very unsupported and alone in facing these issues in their classrooms.

4.7. Therapy Support

One of the main foci of this study is an investigation into how, or what protocols and processes teachers have to follow to make referrals for occupational therapy intervention. A formal referral is based on the assumption that the teacher has correctly identified the learner, and her or his behavioural problem, for further intervention. For this reason, the teachers in this study were asked about their experiences with specialised intervention, more specifically, occupational therapy intervention. It should be noted that two of the teachers interviewed had an occupational therapist on the school grounds daily with whom they were working very closely. Those teachers who were without this assistance were asked about their thoughts on the need for, and role of, an occupational therapist in their classrooms. The teachers without on-site OT support were asked to elaborate on how they thought the intervention should work, and what it should involve.

From the interviews conducted, many of the teachers in this study were able to identify the role of specialised support in the classroom, in particular, occupational therapy support. However, it was remarkable to see the substantial differences in the responses provided by the teachers in the interviews regarding their experiences with OT support. On the one hand, there were the teachers with an occupational therapist on the school premises and on the other hand, there were the teachers with no occupational therapist on the school premises to provide interventions. JVN describes her positive experience with an OT in her classroom in the extract below:

Extract 37: Benefit of on-site support at school

JVN: "Yeah, we are very lucky, especially with the OT and psychologist because they will also see the children in a once a week session, so they give us pointers, or they will pick up "okay, that one needs some looking at". Maybe we should try this or that." So they will also give their input in supporting our kids."

As JVN states in the first sentence, having an OT at the school means that the school is "very lucky" as they have the on-site support to aid them in helping the learners identified as being 'at risk'. The OT is able to provide advice in the moment, which immediately serves to broaden the teachers' thinking in the classroom. JVN continued, providing an example of what the OT helped her with:

Extract 38: In-class support provided by OT

JVN: "... some of the children's chairs are not their size so we collected phonebooks for their feet and cushions for their bums so that they could fit. And then she [OT] has been teaching the children the correct way to sit and hold their book."

The above extract speaks to the teacher's relationship with the OT in helping certain learners in the classroom to support their needs: a very positive relationship. With CK, JVN further acknowledged the privilege it was to have an OT on the school premises daily, as they found the benefits of having the additional support from the OT to far outweigh the hindrances. When asked if there were any difficulties in implementing the recommendations provided by the OT in the classroom, CK stated:

Extract 39: Implementing on-site OT support in the classroom

CK: "Not really. The OT guides you and tells you to do this and to do that. So I just go by the OT's guidelines, I suppose."

The ease with which the teachers were able to implement the recommendations provided due to the OT guiding the process contributed to the teachers' positive experiences, and was one of several benefits of having the OT on-site. In contrast to these experiences, the teachers interviewed who did not have access to an OT on their school premises relayed a very different message as described by AF below:

Extract 40: Implementing recommendations provided by OT in the classroom

AF: "What I can tell you is that it is very difficult. So, I remember with one of the learners the simple things like putting the pencil grips on the pencil - that was easy things. But, there were others where the child had to sit on a ball in the classroom and that became a problem. Because it was fine for the child and I had no issues with it, but it did become a problem for the rest of the class... Like I said, there are 36 children and the activities that the OT gives you can't always be with that one particular child only."

Similarly, CB stated her difficulties with implementing the OT's recommendations in her classroom;

Extract 41: Implementing recommendations provided by the OT in the classroom

CB: "But honestly, it is so difficult to do this in the classroom setting when you have so many different children... It is also a lot of management from my side to incorporate these activities and recommendations in the classroom."

As AF and CB describe it, it is difficult for the teacher to implement the recommendations of the OT in the classroom because of the presence of the large number of other learners in the classroom, and many of the recommendations provided are for one particular child. There was a school that did not have an OT on-

site. Hence, the OT would send these teachers recommendations to be carried out in the classroom, but with no real follow up. This further raises a concern regarding the effectiveness of support provided.

What was clear was that the teachers' responses to the question, as to which learners they refer to OT, allude to the fact that they saw themselves as being able to correctly identify how and why the learners would benefit from OT. AF provides an example below;

Extract 42: Identification for OT support

AF: "...ensuring that the child's gross motor and fine motor and posture are corrected so that they could learn to become more focused in the classroom and manage the attention difficulties."

The teachers addressed the need and role of OT in the schools as they felt that many gaps could be fulfilled by the OT being present on the school premises. Thus, alluding to the underlying reasons that a learner may have difficulty paying attention in the classroom. Correct identification of these learners is crucial for referral purposes for the appropriate support be provided which would be likely to yield favourable results.

4.8. Pedagogical Styles

Unpacking how, via what processes, teachers provide intervention is necessary for understanding their perceptions of attention difficulties manifesting in the classroom. I asked the participating teachers to share and elaborate on their support plans and strategies they used which were geared towards addressing these classroom attention difficulties as they perceived them. These support plans are seen in terms of how the

teacher provides intervention to the learner in the classroom, including establishing a routine, breaking up information into smaller chunks, and encouraging learners to use self as a regulator. Thus, this would be influencing teaching pedagogy and learning, and how the teachers were identifying these learners for additional support.

4.8.1. Benefit of Routine

The teacher is responsible for creating an optimal learning environment for the learners. This awareness on the part of the participating teachers was demonstrated by the teachers' responses regarding support strategies in their classrooms. Four of the interviewed teachers highlighted the importance of maintaining routine in the classroom environment:

Extract 43: Maintaining a routine in the classroom

CB: "Well you know with curriculum changing so much, we have now had to switch to a new way of teaching phonics, called Jolly Phonics. This in itself has caused new challenges for teachers, and it takes away from the normal. So, what I try to do is keep routine as much as possible. This is what they, [the] learners need more of."

This notion was supported by the other teachers, and they felt that the routine provided the learners with the structure that contained them, as they knew what to expect, and this enabled them to feel more organised and settled. Furthermore, routine is a strategy used by the teachers to help the learners take more responsibility for their work and themselves. This routine/structure is presented to the learners as rules that are in place to keep them safe when they are at school. Moreover, the routine is reinforced daily and throughout the whole day that the learners are at school.

4.8.2. Breaking Information into Smaller Chunks

Part of knowing your learners is knowing what they need to learn, at what age they need to learn certain concepts and skills, and how they learn. Many of the teachers noted that their learners with perceived attention difficulties benefited from the instructions and activities being broken down and repeated.

Extract 44: Reasons for breaking up information

CK: "Different children manifest differently.. and then those you need to give them little bits of input because you know that is all that they can manage. So it is a little bit at a time. I am a firm believer in 'too much too fast won't last'."

CK felt that her learners benefitted more from small chunks of information because these were what they could manage. This pedagogic strategy helps her to not overstimulate and overwhelm her learners. Furthermore, due to their learners' poor attention spans at age six or seven, the teachers interviewed reported having to constantly repeat instructions and activities for the learners to complete these. To counter or qualify this view to some extent, one of the teachers raised an interesting thought around finding the balance between providing intervention and opening the space up for the learners to figure out information or a problem by themselves after being provided with the basics.

Extract 45: Balancing intervention and growth

IS: "When you see them struggling and they have this attention difficulty, I am a helper; so it is difficult for me to stop myself from intervening. But I mean, for me, you need to be able to see them grow."

IS emphasised the importance of giving the learners a chance to figure out, unaided, what they need to do after the teacher has provided the basics. Hence, she was suggesting that the instruction would be pitched at their level, and the teacher allows them the space to learn through discovery. Thus, it appeared that finding this balance was something that the teachers struggled with as they saw their learners as needing their support. So it was about finding that balance between giving support and giving them the space to learn.

4.10.3. Teachers' use of Self as a Regulator

Extract 46: Teacher's use of self

CK: "I endeavour to never raise my voice, so I am in voice preservation mode. So I say, if you can't hear me, then you are talking too loud. And I have 'Whisper Wednesday'."

The above extract is an example of how the teacher uses herself to help regulate the learners and guide them in paying, rather than forcing them to pay, attention. In this scenario, her voice is the regulator to get the learners in her classroom to focus and pay attention. Another teacher also shared her voice in keeping the learners engaged in what she was teaching. This came from her understanding that the learners in her class learn differently, so the need for variation in the classroom is important.

One of the teachers commented on the role of other learners in the classroom and how she supports them in supporting each other:

Extract 47: Managing the class response

JVN: "And then, of course, we have to get the other children in the class to understand how the other works. Sometimes they are very understanding and sympathetic, but other children may not be accommodating to their friends. And it is a simple matter of "just give him some space"- you know, that type of thing. You can't always accommodate everyone in that classroom space because they are very needy."

JVN highlights the very important and supportive role that other learners play in the classroom and that she, as the teacher, cannot do it all by herself. For this reason, she uses herself to help the other learners understand and empathise with their peers' needs in the classroom. This use of self has helped her manage the needs of the classroom more effectively and also assists all of the learners in taking more responsibility for each other.

4.8.4. Placement of the Learner and Movement in the Classroom

The physical environment is adapted by the teacher to provide intervention to the learners with perceived attention difficulties. This was highlighted by the teachers interviewed and those observed and noted in the SIAS forms. For instance, the teachers specifically place the learners in the classroom based on their needs, as shown in extract 50 below:

Extract 48: Placement of learner in the classroom

TM: "The learner last year was placed with her back to the window as this allowed her to focus and not be distracted by what was going on outside the classroom."

As shown above, TM found the strategic placement of learners in her classroom to be beneficial to minimising distractions. This has been seen, particularly by Foundation Phase teachers, to be effective in the classroom as it reduces the physical distractions that a learner may have difficulty filtering out. This strategy is often used in conjunction with movement breaks and attention games done with the whole class. Teachers often use these strategies with a class first thing in the morning, or when they notice that they have lost their learners' attention. However, one of the teachers mentioned that these strategies might not work for all learners and, in some cases, may further overstimulate a learner. For this reason, knowing your learners is vital in the management of these strategies.

4.8.5. Safe spaces in the Classroom

One of the teachers reported creating a calming corner in her classroom as a space for learners to utilise when they needed quiet time or felt overstimulated. This space is set up as a quiet space that is calming to the learner to have a moment to regroup. These spaces are utilised by teachers to help engage with the learners when they feel overwhelmed and need a feeling of being safe. Besides creating a physical safe space for learners in the classroom, one of the teachers makes sure that her classroom is a safe and comfy space for the learners:

Extract 49: Expectations of learners in the classroom

JVN: "They are still young and expected to conform. And then they are put into this straight jacket which I call the uniform. So I'm just saying, loosen those buttons, take off the belt of the dress if it's too tight or uncomfortable. Because when we leave the classroom, we just have to tie it up."

JVN elaborates on the restrictions that the school uniform places on young learners and how she creates a level of comfort in the classroom where the learners can let go of the uniform so that they can focus on what is important, which is their learning. Overall, how the teachers support the learners in the classroom is based on their understanding and knowledge of their learners. A starting point for many teachers is to gain more information about the learner to create a safe space for them in the classroom.

Extract 50: Getting to Know the learner

CB: 'Well, usually, at the end of the year, or the beginning of the new year, I like to discuss with the previous teachers to help paint a picture of the child. This helps me get a feel of what to expect with the children coming into my class. Although, I do still prefer to give the child a fresh chance when starting with me.'

This highlights the importance of gaining information about the learner from the previous teacher. This is not in order to make judgements, but to make a fair decision about assisting the learner based on what has been, or is observed in the classroom. By gaining this information about the learner, the teacher can identify the potentially problematic behaviour and be better prepared for what is to come. The information is gained from both the school and home environments;

Extract 51: Gaining collateral about the learner from the home

AF: "But I also like to go deep, so I call the parent in and ask how the child is at home. Because sometimes, what happens in the classroom is one way and total[ly] different at home."

AF had learnt the benefits of using information from home and class environments. As she noted above, the learner may present differently across the two environments, which aids her, the teacher, in getting to know the learner better. She later described how comparing the information about the two environments helps her as a teacher with identifying where and how support needs to take place.

IS shared her way of getting to know her learners in the classroom in the extract below;

Extract 52: Getting to know the learner

IS: "When a child walks into my class, we can suss them out... then we play a game and they introduce themselves. And then I can see who concentrates, who is actually listening to the others. I always ask them questions."

As demonstrated by the three teachers above, getting to know the learner in their classroom is vital for speaking to their needs and accommodating them. The questions posed to the teachers in the interviews were open-ended, thus, not limiting the teachers' responses in a specific way. For example, in the interviews, the teachers shared the different ways they approached their learners and how they adapted the curriculum. The teachers shared that their intervention strategies were geared towards the specific learners in their classroom that had proven effective from past experiences of working with learners with similar behaviours. Much of this intervention included giving learners more time to complete the task and breaking up an instruction into smaller pieces. The teachers also shared the importance of structuring the learning environment to allow for optimal learning to occur, and this was done by providing routine and structure in the classroom. Moreover, the teachers shared strategies they used within the physical environment to support learners learning, such as strategic

placement of learners in the classroom space. Finally, the teachers discussed the many existing barriers to providing support in their classrooms, including curriculum expectations and prescriptions, lack of parental support, and class sizes.

4.9. Conclusion

This chapter analysed the data collected from the one-on-one interviews held with the Grade 1 teachers. The eight themes that arose were discussed through the examination and exploration of the data, each theme bringing out crucial issues to do with attention difficulties in the classroom, ways of identifying these, and ways of supporting learners manifesting these difficulties.

Overall, all six of the teachers who participated in the study had had an experience of a learner, or learners, past or current, in their classroom who presented with what are perceived to be the common indicators of attention difficulties. Another common thread amongst the six teachers was their shared experience of challenges with the parents of the learners in their classrooms. There were two sides to the issue of attention difficulties which emerged from the data above, with the similarities noted above. The one side was the struggles of the teachers who relied on their own experiences to assist learners in the classroom, as a result, they reported feeling unsupported and alone in dealing with their learners' attention difficulties.

On the other hand, some teachers reported having more support on-site assistance. This additional support helped them in turn to support their learners and see them from a range of different perspectives. The data also showed the teachers sharing the many challenges and successes regarding learners' attention difficulties. One of the

heartening themes emerging from the data, and to be highlighted, is the obvious empathy the teachers had towards their learners.

CHAPTER 5

5.1. Discussion

This research aimed to unpack the perceptions of a sampled group of Grade 1 teachers of attention difficulties in their classrooms, and subsequently, how these perceptions led to referrals for additional support for these identified learners, specifically for occupational therapy. It also sought to unpack how these attention difficulties as perceived by these teachers manifested, and how, and in what form, in this case study, support was provided in the classroom. In this research study, the overall question was broken up into five specific questions to address the research comprehensively. Each question is discussed in this section, together with its relevance to the research topic.

To start off with, it was important to unpack the teachers' perceptions of attention difficulties in the classroom, as attention is a skill learners need to possess or to learn to allow for optimal learning to occur (Zelazo et al., 2016). Furthermore, as described by Ready and Wright (2011), the quality of the interaction between the teacher and the learner results from the teachers' understanding of the learner. Thus, as demonstrated by the findings, many of the teachers acknowledged that they had experienced attention difficulties manifesting in some of the learners in their classrooms. There was a consensus amongst all six teachers in the sampled group around the indicators of attention difficulties. What is more, when given the opportunities to think aloud, the interviewed teachers were able to reflect deeper on the reasons for the manifestation of these observed behaviours in the classroom. This demonstrated that there could be more than meets the eye in terms of the causes of these observed behaviours and subsequently support could be provided based on this

more comprehensive understanding. However, the teachers still felt that they could not support the learners effectively.

In addition, these discussions highlighted that the teachers' identification process was based on their previous experiences and 'gut feelings'. In other words, many of the teachers had not received additional training and education on how these learners should be identified and further supported. Teachers' using only their previous experience to identify these learners may lead to them placing these learners in boxes based on what they know from the past. Furthermore, this assumes that teachers would identify the learners differently as they would not all have had the same experiences of learners with attention difficulties. As a result, previous assumptions and techniques are used on different learners, which may not be as effective as they were previously. For this reason, teachers need to be adequately equipped with the information and skills that they need to correctly identify and support those learners with perceived attention difficulties in their process of learning – in other words, teaching the learners how to learn instead of just focusing on the curriculum. Moreover, this kind of information and education needs to be provided on a practical, hands-on level to equip teachers to implement these techniques and skills in their classrooms based on real-life cases.

For effective mediation to take place, the teacher needs ideally to provide a space to allow for optimal learning (Harrison & Muthivhi, 2013). Contrary to this recommendation, the findings of the present study show that the teachers were restricted from providing this space due to a number of factors, including large class sizes, a heavily loaded curriculum, and other duties to be fulfilled at the school. This results in the teacher having to be a jack of all trades. Teachers are expected to act

as mediators in the classroom in ways that cater to the different needs of the learners in order to create an optimal environment for learning. In theory, through this mediation learners can self-regulate. Unfortunately, appropriate mediation does not always take place in the classroom setting as teachers find they have more than one learner in their class who requires their attention. This, leaves teachers feeling as though they are fighting a losing battle as they feel they are not effective in the work that they are doing.

Nevertheless, the teachers in this study all showed that they try their utmost best to provide the support that the learners in their classroom need by utilising school resources such as the SBST, and speaking to other more experienced teachers. However, these teachers found that this kind of support was insufficient and did not satisfactorily solve the problem or improve the situation. This brings into question how successful mediation could or should come into play.

Self-regulation is a key skill which enables one to follow instructions (Rimm-Kaufman et al.,2000). Thus, for a teacher, addressing the self-regulation difficulties a learner, or learners, in their class may have may help the teacher improve the ways in which these learners follow instructions. Following instructions was one indicator of attention difficulties, as perceived by the interviewed teachers, but interestingly, none of the teachers reported using any self-regulation strategies with their learners in their classrooms. For instance, many learners may feel a bit more dysregulated after the weekend as they have recently had more freedom than they have in the classroom to do as they please. This was noted in the findings as one of the challenges arising from learners' home environments. However, while in theory, ideally teachers should be able to identify this and provide the correct, or informed, input for the learners to be

able to self-regulate and complete their work. This should lead to the self-improvised intervention strategies provided by the teacher in the classroom.

Significantly, an overriding theme this research yielded was the participating teachers' reliance on themselves as tools for providing support to the learners with perceived attention difficulties, rather, or to a greater extent than, relying on an OT or on outside support. According to Bodrova and Leong (2007) and to Wertsch (2007) teachers act as mediators to help develop higher mental functions that the learners use to engage with their environment. With teachers playing this role, their learners are able to achieve a level of self-regulation, which aids the learning process (Harrison & Muthivhi, 2013; Kozulin & Gindis, 2007). Accordingly, as has already been mentioned, teachers' mediation is based on their perceptions of the learners and of their learners' difficulties in the classroom situation, and there exists an assumption that teachers are equipped with the adequate skills to act as competent, knowledgeable mediators. As this research showed, some of the teachers empathised with their learners, which gave them the ability to provide the support that catered to their specific needs. By empathetically understanding the obstacles that the learners faced, the teachers were able to use themselves to help the learners overcome their obstacles. This finding is supported by Vygotsky's view of the role of adults in the development of self-regulation in the school environment (Fox & Riconscente, 2008).

Above all, the irony that the research illustrated was that it picked up that many of the teachers felt alone in and with their feelings. Yet, what was clear was that the teachers all shared this feeling without knowing it and that they could and should use each other as support rather than battle alone. I argue that this is especially desirable as, for Grade 1 teachers to act as effective mediators, they need to feel both in control

and supported in their teaching. Ideally, this would require additional pre- and in-service education for teachers, more support in the classroom in the form of teaching assistants, and smaller class sizes. These are factors that can be influenced and provided by the school as well as teacher-training institutions.

The final and equally important research question concerned occupational therapy support in the classroom. Overall, there was limited experience amongst the participating teachers with occupational therapy support. It was noted that support from WCED is rarely accessed due to the length of time it takes for the request to be followed through. For this reason, the teachers reported refraining from making referrals to the department due to previous experiences with the lengthy process. Public schools are meant to access public support, but the 'red tape' associated with referring a learner makes it extremely difficult for the learner to access the support they need. Thus, by the time the learner is seen by an OT for support, s/he has already been struggling for a long time. In addition, many of the teachers noted that, while these behaviours were a common occurrence in the classroom, they would not request support for each of the learners, only those who needed it because of the length of time it took to get attention for the children. This highlights the gap in learner support needed and the intervention provided by WCED, even though there are precise guidelines put in place by the SIAS policy to ensure that learners are supported appropriately and timeously. In addition, it appears from the results of the present study that the SIAS policy is in fact the reason for additional support not being accessed. The teachers feel that the SIAS policy creates unnecessary red tape that is very difficult to get through, so instead, they tend to avoid it completely. Due to this red tape, requests are infrequently made, which leads to the learners being referred privately for additional support, which many of the parents, for financial and other

reasons, cannot access. Hence, the great disservice to the learners who need the additional support and the differentials between affluent and historically disadvantaged schools and learners in this regard.

There is also a double-bind where the teachers can see and identify the need for OT support for the learners in their classroom, they cannot fulfil the recommendations due to other limitations and constraints. In the interviews, the teachers reported that when support was requested, it was found to not to be effective or lasting in its effects. What the teachers said they valued more was having the specialist on-site and in the classroom to show them what they could do to support the learners and, in some cases, the OT would pull these learners out of the classroom. This was shown to provide a more positive intervention experience for the two teachers who had an OT on-site. In terms of the attitudes of teachers, and the quality of their interactions with learners, the study conducted by Hamre et al. (2014) showed positive results for the learners when the teachers adopted a more responsive and 'warm' approach. Similarly, in this study, the teachers were more responsive when they had more support at hand, thus, further supporting the need for more support of various kinds for teachers.

5.2. Limitations of The Study

- The limited number of participants in the present study militated against being able to generalise the results to other similar situations on a wider scale.
- Due to COVID-19, and the accompanying regulations that limited access to school grounds, additional classroom observations could not be conducted.

- There is limited research specifically in South Africa around the role of occupational therapy in the classroom.

5.3. Recommendations

The following recommendations are based on the findings of the current study:

- In regards to teachers' perceptions of the role of an occupational therapist, I recommend that further research should be conducted on the most effective way(s) for occupational therapists to support teachers in the classroom, with a larger sample group to unpack this role in greater detail.
- With regards to the question of how teachers identify and support learners with perceived attention difficulties in the classroom, I strongly suggest that teachers need to receive additional practical training on attention difficulties manifested by young children, and the support thereof. This should be provided either by a Higher Institution of Education which trains pre-service teachers, or by the DoE/WCED to in-service teachers, and be ongoing.
- In addition to the support provided to teachers, there is a need for parental support and for parents' increased involvement in the form of practical education sessions to better equip the home environment to supplement the school environment.
- With regards to the question of teachers addressing learners' attention difficulties needs; best practice is key in providing this support. Below is a list of successful strategies which teachers can implement in the classroom in order to support learners;
 - Scaffolding (including breaking information up into smaller chunks)

- Creating safe-spaces
- Routine and structure
- Use self as a tool in order to gain the attention of learners
- Strategically place learners in order to respond to their needs (i.e. placing learners with attention difficulty away from windows and doors)
- Get to know learners in different environments (in the classroom and at home)

5.4. Conclusion

This research found that, although the six Grade 1 teachers who participated may have had a deep understanding of the observed attention difficulties in the classroom that went beyond what they observed at surface level, there is still a great need for support for these teachers and other teachers of young children. The teachers rely minimally on theoretical knowledge for addressing behavioural problems, particularly those linked to attention difficulties, and more on their own experience to support learners exhibiting this kind of learning barrier in the classroom. Interestingly, many of the teachers in the study requested and saw the need for occupational therapy support; however, they reported this support as being most effective when the OT was able and willing, and present in the classroom, or in a one-on-one situation with a learner, to provide this support to the learners instead of giving the teachers advice about how to assist their learners.

If children with attention difficulties do not receive appropriate support, either from an OT, or from a knowledgeable and empathetic teacher, failing the lack of education department support, this can jeopardise their future development and their academic performance, lasting into high school, and possibly affecting their future careers.

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