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EXPLORING FACTORS THAT LEAD TO LATE IDENTIFICATION OF LEARNING DISABILITIES IN PRIMARY SCHOOLS

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ABSTRACT

Research highlights that children experiencing difficulties in mastering some aspects of educational work might be termed as having a learning difficulty. Learning disability is a condition in the brain that causes difficulties to comprehend, process, retrieve and store information which can be caused by various factors. This paper explores factors that lead to the late identification of learning disabilities among primary school learners. The paper, written against the backdrop of B.F Skinner's behavioral theory, reveals that there are numerous factors associated with the late identification of learners with learning disabilities, including, among others, parents' lack of knowledge about learning disabilities and teachers' lack of training on how to identify and assess learners with learning difficulties. The report also demonstrates that failing to recognize early warning signals of children with learning difficulties is a concern for teachers and parents, resulting in many unidentified or undiagnosed cases. As a result, the sooner a learning problem is identified, the more likely a child will succeed in school through early intervention measures. The paper recommends investment in early childhood screening, building expertise for educators and healthcare providers to recognize early signs, reducing class sizes, and need for the Department of Education to organize special training workshops in adaptive instructions for teachers as well as children with LDs in regular classroom settings.

Keywords: Learners; late identification; learning disabilities; difficulties; parents; primary school; teachers.

INTRODUCTION AND BACKGROUND

Learning is normally regarded as the process of acquiring new knowledge, behaviors, skills, values, preferences or understanding and may involve synthesizing different types of information (Jooste, 2015). Research indicates that a child who is experiencing problems or difficulties in mastering some aspects of his/her educational work might be described as having a learning disability (Miller & Tallal, 2006).

A learning disability, according to Plante (2018), is a condition in the brain that causes difficulty comprehending or processing information. It can be caused by a variety of risk factors that are usually present from birth, such as alcohol or drug abuse, complications during birth resulting in a lack of oxygen in the brain, the mother's illness during pregnancy, and very premature birth. However, Miller (2006) states that there is confusion about the use of the term learning disabilities because it varies by country and whether the perspective is medical, social, or educational.

Furthermore, the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013) defines a learning disability as a type of neurodevelopmental disorder that impairs the ability to learn or use specific academic skills such as reading, writing, or arithmetic. According to the DSM-5, learning disabilities are caused by neurological differences in brain structure and function, which affect a person's ability to receive, store, process, retrieve, or communicate information. Unexpected, significant difficulties in academic achievement and related areas of learning are best described as learning disabilities (APA, 2013).

According to research on childhood impairment and disability, individuals with learning disabilities face unique challenges that are often persistent throughout their lives, depending on the type and severity of the disability (Kate, 2012). Shawytiz, Fletcher, and Escobar (2013), concur with the above and state that many people with learning disabilities have low self-esteem, set low expectations for themselves, struggle with under-achievement and under-employment, have few friends, and appear to get into more trouble with the law than their non-LD peers.

Nippold (2017), argues that some people, particularly learners, never realize that learning disabilities are to blame for their lifelong difficulties in areas such as reading, math, written expression, and comprehension; others are not identified as having learning disabilities until they are adults due to a variety of factors such as a shortage of well-trained and qualified educators who have the necessary skills and competencies to deal with children who have learning disabilities, as well as a lack of information and awareness about the existence of learning disabilities.

LITERATURE REVIEW

Learning Disabilities in the South African context

Research indicates that many children may face learning challenges at some point in their lives. These are frequently temporary and can be defeated with the help and encouragement of parents and the school. Unfortunately, not everyone is as fortunate. The effects of a Specific Learning Disorder (SLD) can be felt throughout an individual's life, including academics, the workplace, relationships, and daily life. Professionals, who have a thorough understanding of SLD, its manifestation, assessment, and implications for classroom performance are in a much better position to provide support and recommend interventions that can lead to success in the classroom and in life (De La Paz & McCutchen, 2011).

According to studies, South Africa has an estimated 600,000 disabled children who are not attending school, but the government has not published accurate data. According to government data, nearly 121,500 students with disabilities attended "ordinary" schools in 2015. Over 119,500 students were enrolled in special schools in 2017, and nearly 11,500 children with disabilities were on waiting lists. The majority of disabled children in South Africa do not have access to free education. Although most children who attend public schools do not pay school fees, South African laws do not automatically guarantee the right to free education. However, most disabled children in public special schools are charged fees. Furthermore, many children with disabilities who attend mainstream schools are charged additional fees that children without disabilities are not (Bradley, Barnard & Lloyd, 2010).

Furthermore, the government differentiates between public special schools and other public schools. Special schools are still not included in the annual "no-fee" school lists published by the federal government. Human Rights Watch discovered in 2019 that Gauteng province listed 5 special schools as "no-fee" for the first time out of 128 special schools in the province. All special schools were excluded from the Western Cape province's 2017 "no-fee" school list (Brady & Woolson, 2008).

Moreover, Barzargan (2006) argues that in South Africa, learners experiencing barriers in learning are categorized based on their medical conditions, or the problem within the child. Learners were diagnosed, treated, and placed in a specialized environment, which resulted in labeling. A special curriculum was followed in these specialized environments, and special learners received intervention from specialist staff and professional experts.

The South African Department of Education (2001) used the term barriers to learning and development to define learning difficulties. This definition is different from other definitions in that it included external causes for a learner's inability to learn. Learning disabilities, according to South African White Paper can be curriculum based or may also be a result of other environmental factors, such as the physical school environment, where the buildings may be unsafe, inappropriate language is used for teaching, or the non-recognition and non-involvement of parents (Bee, 2015).

Causes of learning disabilities

According to the National Centre for Learning Disabilities (2017), researchers do not know what causes learning disabilities, but research suggests several risk factors that may be present from birth. According to Harstad (2018), children who have parents who have a history of learning disabilities are more likely to develop a learning disability themselves. Researchers are studying how children's brains learn to read, write, and develop math skills to better understand learning disabilities.

Shaywitz, Fletcher, & Escobar (2013) argue that it is generally assumed that learning disabilities are caused by neurological dysfunction. This theory has so far, however, been unable to produce any tangible practical results even though a leading theory among scientists is that learning disabilities stem from subtle disturbances in the way brain structures are formed. Researchers are not exactly sure of what causes learning disabilities, some possibilities include severe head injuries, genetic links, abnormalities in fetal brain development, complications during pregnancy and birth, prenatal exposure to harmful substances, toxins in the child's environment, etc.

Harstad (2018) discovered that factors that affect a developing fetus in the womb, such as alcohol or drug use, can put a child at risk for a learning problem or disability. Other environmental factors in an infant's environment may also play a role. Poor nutrition or lead exposure in water or paint are two examples. Young children who do not receive the necessary support for their intellectual development may develop learning disabilities once they begin school. Because of an injury, a person may develop a learning disability later in life. Dementia or a traumatic brain injury are two possible causes of this situation (Addams, 2010).

Diagnosis of learning disabilities

According to the Diagnostic and Statistical Manual of Mental Disorders V (APA, 2013), learning disabilities are traditionally tested by conducting two tests and noticing discrepancies between their scores. These tests are intelligence (or IQ) tests and standardized achievement (reading, writing, arithmetic) tests. Most children found to have a learning disability have normal or above-normal intelligence but do not truly demonstrate that potential on achievement tests (Langford, 2005).

Evans (2002) states that when a learning disability is not detected early, undiagnosed, or unremediated and treated effectively, it can cause several other problems. These additional difficulties may be emotional, and a child can show signs of sadness, frustration, or disappointment. Behavior problems like acting out may occur. However, Evans (2002) also states that learning problems may show up within the family, causing, for example, misunderstandings, increased stress, or blaming others.

Studies show that among children whose families seek professional help for emotional or behavioral problems, 30 to 50 percent of them have a learning disability. According to the Diagnostic and Statistical Manual of Mental Disorders V (APA, 2013); learning disabilities can only be diagnosed after formal education starts.

However, Miller & Thallal (2006) state that recognizing the warning signs of learning disabilities and getting children the necessary help as soon as possible can be critical to a child's future. According to Nipploid (2017), parents must be familiar with the early signs of a learning disability to get the appropriate help as soon as possible. According to research, the earlier a learning disability is identified, the better a child's chances of success in school and life. Early detection and intervention can provide parents with the tools their children need to cope with and compensate for a learning disability (Dane, 2011).

Learning disabilities and late identification

According to Asaka, Mouldin, Griffin, Seager, Shurrell, and Berry (2005), most students with learning disabilities are not identified until grade 3-4 of primary school due to teachers' lack of knowledge and competencies about learning disorders. In accordance with the research, this problem is always likely to appear in students, and if teachers cannot identify it, students will continue to be labeled as lazy, irresponsible, and lacking in interest and motivation. These students are typically deprived of appropriate learning and education opportunities; they suffer from common social and emotional disorders; they have low motivation and incomplete learning from their lessons; and they have low motivation and incomplete learning from their lessons (Karande, Satam, Kulkarni, Sholpurwana, Chitre & Shah, 2007).

Miller (2006) states that the process by which public schools identify students as learning disabled often appears to be confusing, unfair, and logically inconsistent. In fact, G. Reid Lyon of the National Institute of Child Health and Human Development has suggested that the field of learning

disabilities is a sociological sponge whose purpose has been and is to clean up the spills of general education.

Research indicates that substantial proportions of school-identified students with a learning disability (LD) fail to meet state or federal eligibility criteria (De La Paz et al., 2011). All & Slak (2013) noted that although this finding is not in and of itself surprising, the magnitude of the percentage of school-identified LD students who fail to meet eligibility criteria ranged from 52 to 70%.

Harstad (2018) argues that unlike diagnosing children with physical or sensory disabilities or those with more severe forms of mental retardation, efforts to detect students exhibiting milder disabilities such as LD or mild mental retardation (MMR) are fraught with much error in the sense that children meeting criteria often go undetected. Because the diagnosis of these milder disabilities primarily occurs in public schools, only those children referred for assessment are at risk for formal labeling (Harstad, 2018).

Furthermore, Thompson (2008) argue that it is clear with longer learning disorders, continue at each level and intensity without identification, categorization, and rearrangement. Nevertheless, if children with learning disorders can be identified early and treated, implications would be positive (Gunderston & Siegel, 2001). Previous work examining students whom general education teachers referred has shown that almost half of those referred had IQ scores between 71 and 85 and an additional 16% scored below an IQ of 70 (Thompson, 2008).

Based on the above, research reveals that teachers perceive low-aptitude students as among the most difficult to teach. When Garcia et al., 2016, applied the current IQ cut scores recommended by the American Association on Mental Retardation ($IQ < 75$), they found that approximately 30% of all referred children scored below that level (Karande et.al, 2007).

Inadequate preparation of teachers as a contributing factor to invalid prevalence estimates

Literature indicates that a teacher's knowledge about LD can be influenced by several factors, such as experience, quality of education, special training, interests, and a child's gender. Teachers, experience is also one of the most frequently mentioned factors influencing their knowledge about learning disabilities although some studies reveal different results (Scuitto, Terjesen & Frank, 2000). According to Scuitto et al., 2000, directions of educational politics and the educational system have also a significant impact on teachers' knowledge.

According to the study conducted by Lyon (2011) a major factor contributing to invalid prevalence estimates may be the inadequate preparation of teachers by colleges of education. Recent studies have indicated that a majority of regular classroom teachers feel that they are not prepared to address individual differences in learning abilities within classroom settings. Even more alarming, research suggests that special educators themselves do not possess sufficient content knowledge to address the language and reading needs of children with learning disabilities.

Without adequate preparation, teachers tend to over-refer children for specialized assistance because they feel ill-equipped to provide the necessary services.

Parent's perceptions of learning disabilities

Stone, Bradley & Kleiner (2010) found that when parents were asked to describe the difficulties of their child with learning disabilities, they tend to describe the difficulties in terms of physical disorders and attention span. This finding indicates that even parents of children with learning disabilities are unclear as to what problems their children are facing. This finding could also be an expression of the parents' need to protect their children and family from the stigma attached to having a disability (Stone et al., 2010). This denial or lack of knowledge can lead to miscommunication and frustration with the education system.

Moreover, Swart and Pettipher (2005) argue that parents react emotionally to their children with learning disabilities, but also react to the pressures applied as a result of the community's perception of the disability. Often the community's perceptions of children with disabilities may cause parents to not feel welcome to participate in many social clubs and functions within their group. These reactions may lead to parents being isolated from their community (Swart & Pettipher, 2005).

Research reveals that this emotional reaction is even more evident in immigrant families whose closer ties are within their minority community. Parents who predict rejection from their community will tend to deny that their children have disabilities, to maintain their group acceptance. When parents deny the existence of a disability in their child, this can impede the normal emotional maturity the child is attaining (Aboomohamadi & Khagolani, 2005).

Furthermore, Taylor (2000) states that some of the most common reactions of parents to their children with disabilities include: not realistically accepting the problem (e.g. defending and using excuses for the child's behavior); rejection of the problem (e.g. believing that a curve will be found or it will just go away); Shame (e.g. fear of the community's reaction); self-pity (e.g. asking "Why me?"); guilt(self-blame); depression ambivalence (e.g wishing the child was never born) and optimism. Caucasian parents usually experience grief, but do not accept the problem and are more likely to be actively involved in the diagnosis and intervention process (Wardsworth, 2008).

Nevertheless, Angelides (2008) argues that other broad cultural differences may influence parental perceptions and willingness to acknowledge learning difficulties in their children. In America's individualistic culture, the squeaky wheel gets the grease. Parents from collectivist cultures speak of their children's strengths and weaknesses in terms of family characteristics (Dane, 2011).

THEORETICAL FRAMEWORK

A theory is a scientifically acceptable set of principles offered to explain a phenomenon. Theories provide frameworks for interpreting environmental observations and serve as bridges between research and education (Miller, 2006). Research findings can be organized and systematically linked to theories. Without theories, people could view research findings as disorganized collections of data, because researchers and practitioners would have no overarching frameworks

to which the data could be linked. Even when researchers obtain findings that do not seem to be directly linked to theories, they still must attempt to make sense of data and determine whether the data support theoretical predictions.

A theoretical framework explains or suggests a relationship between concepts or ideas. In the context of research, a theoretical framework refers to theories that are formulated to explain, predict and understand phenomena and in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions. A theoretical framework is based on introducing and describing a theory that explains the research problem under scrutiny and why it exists (Swanson, 2013).

Several theories have been suggested to explain the concept of Learning Difficulties. The theory illuminating the present study is the Behavioral Theory by B.F. Skinner (1958). Applied to this study the theory seeks to explain learning by objectively observing changes in behavior. The theory is based on the principle that learning begins when a cue or stimulus from the environment is presented and the organism reacts to some type of response (Wagner, 2010).

As applied in the present study, one of the factors that may lead to the late identification of learners with learning difficulties is the lack of appropriate training and competencies for teachers who are the secondary caregivers of learners. Thus, failure to identify behavioral problems which may be the early signs of learning difficulties at schools.

AIMS AND OBJECTIVES OF THE STUDY

The study aimed to identify and explore factors associated with the late identification of learners with learning difficulties in primary schools. In particular, the objectives of the study were as follows:

- ✚ To investigate factors that lead to the late identification of learners with learning disabilities.
- ✚ To investigate how teachers and parents, identify and manage children with learning disabilities.
- ✚ To determine professional ways to improve the quality of life of children with learning difficulties.

RESEARCH METHODOLOGY

In this study, the researcher used both quantitative and qualitative research designs as the study was exploratory in nature. According to Babbie & Mouton (2001), an exploratory study is a study where the research question demands the researcher to explain the relationship between variables and demonstrate how changes in one variable cause changes to another (Bless et al., 2006). This type of research seeks to investigate a problem that is not clearly defined to have a better understanding of the existing literature but will not provide conclusive results which is why the present study focuses on exploring factors that lead to late identification of learners with learning disabilities.

Moreover, Bless and Kagee (2006) a research design in quantitative and qualitative research is a detailed outline for the testing of a hypothesis, spelled out in clear and definite terms. It is a specification of the most appropriate operations which need to be performed to test a specific hypothesis under given conditions.

SAMPLING AND DATA ANALYSIS

A purposive sample was used and to collect a questionnaire consisting of open and closed-ended questions was used. The questionnaire was self-constructed based on the objectives of the study and consisted of two sections, A and B. Section A required demographic information of the respondents while section B explored people's perceptions about learning disabilities. The questionnaire was in the English language. To assess the Reliability and Validity of the questionnaire, pretesting using 10 respondents was done; and the results were later incorporated into the main study. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 16.0.

DATA COLLECTION PROCEDURE

To collect data for the study, the researcher planned with the school principal to invite parents of learners at the school on the date agreed upon to participate in the present study. This arrangement was made after participants were selected for the study and appointments were made to arrange a time that suited both the researcher and participants. On the day of data collection, questionnaires were distributed to participants.

Before participants completed the questionnaire, the purpose of the study was briefly explained, and informed consent forms were signed by all participants. The researcher was of assistance in cases where respondents needed clarity on some of the questionnaire items. It took participants approximately one hour to complete the questionnaire and completed questionnaires were returned to the researcher.

ETHICAL CONSIDERATIONS

Applicable Social Research Ethics such as permission to conduct the study informed consent, voluntary participation, anonymity, confidentiality, no harm to participants, and publication of findings were observed during the study.

RESEARCH FINDINGS AND DISCUSSIONS

Biographical data

According to the research findings, most participants in the study were between the ages of 33 years and above. In terms of gender, 55% of the research participants were females and 45% were males. Most participants were single, few were married, and most were Africans. Based on the research findings, most of the research participants were Christians.

Causes of learning disabilities

Based on the results of the study, 40% of the participants reported that learning disabilities are caused by problems encountered by the mother during pregnancy. This coincides with the research conducted by Tirussew (2013) which stipulated that damage to a child's brain may be inflicted on

the neurological system at birth by conditions such as abnormal fetal positioning during delivery, anoxia (a lack of oxygen), or chemicals in the blood.

According to Kate (2012) when a baby's brain is given certain kinds of chemicals or does not get enough blood or oxygen, permanent brain damage can occur. Many students with learning disabilities have had some sort of trauma either before or during their birth. In some cases, the mother's immune system reacts to the foetus and attacks it as if it were an infection.

However, based on the study, about 30% of the participants believed that prenatal exposure to harmful substances such as drug and alcohol abuse may be one of the leading factors in the development of learning disabilities. This is consistent with the study conducted by Kate (2012) stated that drugs prescribed or otherwise taken by the mother pass directly to the foetus.

About 20% of the participants view genetic factors as one of the causes of learning disabilities, while a minimum of 10% reported incidents after birth as another cause of learning disabilities. This is consistent with the findings by Raskind et al., (2001) which support the hypothesis that learning disabilities tend to run in families and there may be a genetic link.

Possible attributing factors to late identification of learning disabilities

According to Aberg et al., (2009), early identification of learning disabilities can pave the way for children to get the support they need to experience successful futures both in and out of school. Knowing the early warning signs that put young children at risk for learning disabilities and understanding normal developmental milestones help with early diagnosis and intervention. However, the present study found that various factors may contribute to the late identification of learning difficulties:

- Parent's lack of knowledge
- Teacher's lack of appropriate training to assess children with learning disabilities.

Parent's lack of knowledge

Based on the results of the study, 40% of the participants reported that one of the leading factors in the late identification of learning disabilities is the parent's lack of knowledge about the condition. This is consistent with the information from Gibson (2011) study which also stated that parental knowledge of learning disabilities was still lacking, and this had a significant impact on the identification of learning disabilities.

Teachers' lack of appropriate training to assess children with learning disabilities.

Based on the results of the study, 5% of the participants reported that one of the leading factors in the late identification of learning disabilities is the teacher's lack of appropriate training to assess children with learning disabilities. This coincides with the research conducted by various researchers.

According to Nippod (2017), teacher training has an impact on teachers' frame of mind, attitudes, and practical outcomes. Teachers' training programs focus more on teaching the subject rather than on teaching and understanding the child. The main trends in the educational system and teacher training can influence teachers' perception and knowledge of such children (Dunbar-Krige & Van de Merwe, 2010).

However, according to the study conducted by Lyon (2011), a major factor contributing to invalid prevalence estimates may be the inadequate preparation of teachers by colleges of education. Recent studies have indicated that a majority of regular classroom teachers feel that they are not prepared to address individual differences in learning abilities within classroom settings. Even more alarming, research suggests that special educators themselves do not possess sufficient content knowledge to address the language and reading needs of children with learning disabilities. Without adequate preparation, teachers tend to over refer children for specialized assistance because they feel ill-equipped to provide the necessary services.

Most studies have investigated teachers' knowledge regarding learning disabilities and revealed that teachers have limited knowledge about learning disabilities. These studies reveal the prevalence of teachers' misconception that a learning disability is a consequence of parental spoiling and LD pupils are just lazy (Fleisch & Schoer, 2014). The teacher's lack of knowledge regarding the prognosis of LD has been brought up.

Furthermore, the current study has shown that signs of learning disabilities appear in the early years of a child's life. Yet many educators and healthcare providers do not receive training to recognize these signs. To resolve this, educators and healthcare providers should receive training prior to entering their profession and throughout their careers. One resource to support this professional development for educators is Every Student Succeeds Act (ESSA)'s the creation of a national centre focused on students who are at risk of not attaining full skills due to a disability. Once established, this centre will give parents and educators access to evidence-based tools to build knowledge of the early signs of learning and attention issues and become familiar with effective teaching strategies (Kate, 2012).

CONCLUSION

The study sought to explore the factors that contribute to the late identification of learning difficulties in primary school students. The study's objectives were to examine schoolteachers' perceptions of learning difficulties, to investigate factors that may lead to late identification of early signs or symptoms of learning disabilities and to investigate how teachers identify and manage such learners, and to discover coping strategies that teachers can use in ensuring that learners with learning difficulties by determining professional ways to improve the quality of life of children with learning disabilities.

However, the study discovered that a variety of factors are associated with the late identification of learners with learning disabilities. According to the current study, a lack of awareness of the early warning signs and symptoms of learning disabilities is also a problem for both teachers and

parents, as it leads to many cases going unidentified or undiagnosed. The earlier a learning disability is identified, the more likely a child will succeed in school using early intervention strategies. This research has revealed that genetic factors can also cause learning disabilities and well as complications during pregnancy at birth.

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