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Option: Language and culture

A study of Learning Disabilities: The case of Dyslexia among Mouloud

Feraoun's Primary School, Guelma.

**A Dissertation Submitted to the Department of Letters and English Language in Partial
Fulfillment of the Requirements for the Degree of Master in Language and Culture**

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Dedication

This project is dedicated to disowned, deprived, raped, sexually harassed, psychologically and physically unhealthy children, children with abusive parents, childhood trauma survivors, and girls who have been forced to marry underage. It is dedicated to all of the reasons I am now concerned about lending a hand with all means to these groups of society, as well as all reasons why I refuse to take on such a big responsibility, parenthood.

To my friends Meriem and Nidal, who always made things look simpler, and to Ala Hafferssas, who was always ready to help and answer my research-related questions. To my nieces Lydia and Dania, my nephew Med Ali, siblings, and parents, especially my mother, who allowed me to work on this paper without having to wash the dishes, I hope I have given you a sense of pride and love you all.

Hadia.

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Abstract

Learning disorders are worldwide issues that may affect individuals, especially young learners. According to the researcher's personal experience, the choice of this topic was motivated by what she observed of adults' lack of awareness of children's psychological, psycholinguistic, and educational psychology concerns, particularly among primary school teachers and parents. This paper aims to identify learning disorders, provides an overview of the field's history in addition to covering learning disorder types, highlights the main aspects of dyslexia, and finally investigates the situation of Mouloud Feraoun's primary school kids of Guelma and answers the question of whether or not their learning disorders are detected. Moreover. To achieve the study's objectives, the research is a mixed-method approach in which data are gathered through a questionnaire forwarded to one of Guelma's primary school teachers to examine their awareness aside from an interview with psychologists to get detailed information about the topic. To conclude, the researcher intends to shed light on a much-ignored topic in Algerian society, striving not only for awareness but an enhanced learning environment for children as a national then a global investment.

Key words: Learning disabilities/ disorders, Educational psychology, Special education and Dyslexia.

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General introduction

1. Statement of the Problems
2. Research questions
3. Aims of the study
4. Methodology
5. Structure of the research

Statement of the problem

Learning is the ongoing process of acquiring new knowledge and it is the gate through which children are exposed to new perspectives that would result in their mental and personal development. This process requires focus, communicative skills, engagement, and soft skills related to reading and writing. However, many children across the world are prone to learning problems; precisely language learning problems. This latter can be due to neurological factors in which their brains function differently resulting in poor decoding, poor spelling, and inaccuracy in recognizing words, psychological factors are characterized by trauma, suppressed emotions, fear, anxiety, etc. and environmental factors such as bullying, violence, discouragement, and degradation from parents or friends. In fact, some children at primary school demonstrate various symptoms of different disorders regardless of their intellectual abilities; thus the problem lies in the degree to which parents and teachers are aware of those learning issues and how they are willing to deal with such children. Consequently, if they recognize their issues, they will be able to learn about those disabilities more and discover efficient teaching techniques to make the children achieve better learning as well as making them realize their uniqueness in society and learn about their own difficulties as individuals. Therefore, learners who suffer from language problems, given enough encouragement, extra effort, and appropriate knowledge to deal with themselves, will have a sufficient opportunity to adapt to their classmates. This can only be achieved if the child is in an appropriate environment with the right means and people who can detect his/her problems, get him/her diagnosed, and work on evaluating him and determine his needs to achieve an improvement.

Research questions:

In order to understand more about the issue of learning disorders and determine the aims of the study, a number of questions posed are

What are learning disabilities?

What are learning disorders related to language learning?

What is dyslexia?

What are the types of dyslexia?

What is the difference between learning disorders and mental disorders?

How can a parent/teacher notice child with dyslexia?

How can the teacher detect this child?

Could the existence of psychologists in schools help overcome pupil's dyslexia?

What techniques should be used to make the child overcome his/her dyslexia?

Aims of the study

This research aims at

1. Investigating language learning disorders among primary school pupils concerning their mother language. (Dyslexia)
2. Discovering ways both teachers and parents would be able to distinguish dyslexic children.
3. Highlighting the importance of having active educational psychologists at primary schools.

Research methodology and design:

The nature of this research requires it to be mixed method approach since the study aims to explore a quality among primary school learners and gather information from learners' teachers through a questionnaire to help the researcher observe teachers attitudes about dyslexia.

Structure of the research:

This research will be divided into three chapters, the first chapter will be theoretical and it is entitled "Learning disabilities", it includes a historical overview about the field of learning disorders, definitions, types, and symptoms of various learning disabilities. The second chapter is entitled Dyslexia and it includes a close-up of this disorder, how and why it can occur and its different types and symptoms. The last chapter is entitled "Field investigation" this chapter will be more practical, in which the investigation occurs. It includes a description of both the questionnaire and the interview and it analyses the gathered data and interprets the results according to both of them.

Chapter One: Learning disabilities

Introduction

1.1 Learning disabilities

1.2 Historical overview of Learning disabilities

1.2.1 The foundation phase 1800-1930

1.2.2 The transition phase 1930-1960

1.2.3 The integration phase 1963- present

1.3 Types of learning disabilities

1.3.1 Attention-Deficit Hyperactivity disorder

1.3.2 Auditory processing disabilities APA

1.3.3 Language processing disorder LPD

1.3.4 Nonverbal learning disabilities

1.3.5 Visual perceptual/ Visual Motor Deficit

1.3.6 Dysphasia

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1.4 Learning disabilities vs mental disabilities vs intellectual disabilities

conclusion

Introduction

Language development is a process that any child is exposed to, starting from the day, the baby begins to produce sounds and reacts physically to what his/her parents say until he can make clear words and sentences. However, not all children learn to process language the same way because many of them suffer from learning difficulties. Although it is more accessible for parents to notice that the child is late than usual when producing words orally. However, when the child reaches school age, they tend to consider that his oral skills are enough to be academically successful, while learning disabilities may not constantly occur in the child's preschool stage. The following chapter of the research work is particularly indicated to manifest learning disabilities in a theoretical sense, their historical background, and an overview of different types of specific learning disorders.

1.1. Learning Disabilities

A learning disability or disorder is an impairment in developing a person's life skills, including language processing, mathematics, and reasoning. This definition actively demonstrates that it is more difficult for people who suffer from such disorders to learn specific skills, and it may be either mild or relatively severe. Some people are born with particular learning disabilities; others develop them through accidents or childhood illnesses. People with mild disabilities may be able to lead independent lives with minimal assistance, while people with severe disabilities require 24-hour care and service to achieve the most conversational abilities. (*Learning Disabilities*, n.d.)

According to the Department of Health (2008), learning disabilities are defined as incompetence in understanding complex information and learning new skills, including a decreased ability to function independently, which begins from childhood and has lifelong effects on a person's growth as an adult. Further, The Learning Disabilities Association of Canada released an official definition that identifies Learning disabilities as disorders that affect the acquisition, organization, retention,

understanding, and processing of verbal or nonverbal information. A Learning disability means that one or more areas of human development are affected, such as language processing, visual- spatial processing, memory and attention, and executive functions (e.g., planning and decision- making). (Stegemann, K. C. (2002)

Another research reported that LD is a neurodevelopmental condition that is quite different from intellectual disability, and it may occur in both children with regular or even high intellectual performance since it affects only some specific functions. However, children with intellectual disabilities struggle with difficulties that have a broad impact on mental functions. (*Learning Disorders - Children's Health Issues*, n.d.)

1.2. Historical Overview of the Field of Learning Disabilities

For centuries, countless children have been perplexed by their inability to achieve decent or even mediocre academic success due to anxiety, pressure, and stress caused by their extreme lack of reading, writing, or doing math; in addition to the ignorant parents and strict teachers who constantly put the blame on them and describe them with words like 'stupid' 'careless' and 'lazy'; eventually, many of them become victims of public school systems and end up dropping out of school to end their terrible experience. Many reasons can justify the fact that some children cannot perform appropriately in school. Learning disabilities are one of the most common.

1.2.1 The Foundation Phase (1800's to 1930's)

Even though learning disabilities have been formally recognized by the United States' Department of Education recently (1969) (*World Literacy Foundation*, 2021) and The Federal Government have been actively investigating them through task teams, legislation, and financing since the 1960s and 1970s, learning disorders had their actual provenance in the early 1800s (Hallahan & Mercer, 2001). The first known example of LD was identified in 1802 by Franz Joseph Gall, a German-French anatomist and a physiologist. Joseph noticed a connection between brain damage in soldiers and their consequent expressive language disorders. In 1822, Gall published a book entitled *Sur Les Fonctions*. He described his view about how the

brain was divided into twenty-seven separate organs and how those organs function imperfectly due to a cranial glitch (Who, 2005). In a research by Hagw and Silver (1990), they stated that , in 1877, a German physician called Adolph Kassamul, for the first time, coined the term blindness, which indicates the lack of ability to read. Nowadays, the modern term to describe this particular condition is alexia, a neurological disorder type of dyslexia that also means the inability to identify or comprehend either complete words' total blindness', or some letters'partial blindness', usually both are caused by brain damage.(Miller, 2002).

As cited in Carlson's research (2005), Christenson, Griffin, & DeLand (1988) stated that "A German eye doctor named Rudolf Berlin actually initiated the use of the word dyslexia as it pertains to the ability to read, but it was John Hinshelwood-an ophthalmologist-and W. Pringle Morgan-a general practitioner-who took Kassmaul's work on LD further into scientific research. In 1896, Hinshelwood noted the difference between the alexia-complete word blindness-and dyslexia, which is a partial impairment."(Clarson). According to research by Snowling (1996), on November the 7th of 1896, in the British medical journal (BMJ), Pringle-Morgan reported that both he and John Hinshelwood theorized that LDs are caused mainly by "congenital word blindness" and although it was widely common that dyslexia was caused by visual processing deficiencies, and many scientists were interested in studying the function of the visual system in the origins of dyslexia, most research now suggests that dyslexia is a verbal deficiency that may be classified as part of the spectrum of language disorders. Despite that, in the late 1920s, Dr. Kurt Goldstein, a German neurologist, and psychiatrist, was the first to notice the LDs phenomena that were later called the invisible handicap. The researchers who made significant progress in understanding some of the most frequent forms of LDs were Samuel Orton (1879-1948), Grace Fernald (1879-1950(Marion Monroe), and Samuel Kirk (1904-1996)

According to educational historians, Samuel Orton and his wife, June Orton (1901-1977) were the pioneers in the treatment of dyslexia and are two of the most important figures in the history of dyslexia. They conducted research, taught educators and therapists, and even treated individuals who struggled with reading and writing. (Columbia, 2003). Moreover, In

1925, Samuel Orton published a paper entitled "*WORD-BLINDNESS" IN SCHOOL CHILDREN*" as he criticized the medical literature's view on the term and argued that psychometric tests usually give an extreme unfair estimation of the intellectual capacities of children with 'congenital word-blindness'. Simultaneously, during an experimental clinic in Greene, Samuel Orton conducted report held by members of the Iowa State Psychopathic Hospital Staff in Greene County, Iowa. In January 1925 about a considerable number of children whose teachers reported to the clinic as "dull, subnormal, or failing or retarded in school work" had intense difficulty learning to read. (Orton, 1925) Orton reported that A survey of students with learning difficulties reveals a significant rise in reading difficulty in the second and third grades. The majority of these youngsters adjust to the challenge on their own and learn to read without any additional training. Some, however, do not, and it appears that strategies may be created to educate people with exceptional situations to read. (SAMUEL, 1925)

1.2.2 The Transition Phase 1930's to 1960's

Grace Maxwell Fernald is an educational psychologist who was born on November 29, 1879, in Clyde, Ohio. She spent her childhood in both New York and New Jersey. In 1903 Grace gained her A.B., two years later, she received her M.A. Degree from the same institution Mt. Holyoke; nevertheless, her Ph.D. was received in 1911 from the University of Chicago. Furthermore, Fernald gained recognition for her efficient teaching methods for disabled readers, her students frequently refer to her as their "Academic diagnostician." Grace Fernald made a significant contribution to education by developing a technique for educating impaired readers that employs kinesthetic and tactile signals in addition to standard visual and auditory signals. ("Grace Maxwell Fernald (1879–1950) a Biographical Sketch," 1970).

The third researcher's name was Marion Monroe (1898-1983) a child psychologist who was born in Mount Vernon, Ind., and received her Master's and Ph.D. from the University of Chicago. She worked as Orton's research assistant; thenceforth, she left to work at the Institute for Juvenile

Research as well as teaching reading courses at the University of California, Los Angeles, and Berkeley campuses. (Upi, 1983) (Carlson, 2005).

In her book "*Children Who Cannot Read*," (1932) Dr. Monroe provided a technique that any school system can easily apply. It is based on creating an "educational profile" for studying each child individually in order to determine his/her ability to recognize words, it includes school grades of the child, his or mental and chronological age on the Stanford-Binet test, achievement in arithmetic computation on the Stanford Achievement Test, score in spelling on the Ayres Spelling Scale, and scores in four reading tests. Miss Monroe believes that reading should be evaluated based on fundamental mental capacity. Besides reading, she considered competence in arithmetic computation and spelling as indicators of educational development (Dolch, 1933). Monroe's contribution lies in introducing an approach to identifying students with reading disabilities based on the concept of the difference between actual and expected achievement (Hallahan & Mercer, 2002)

1.2.3. The Integration Phase (1963 to present)

Samuel Alexander Kirk, an American psychologist who was born on September 1 1904 in Rugby, North Dakota. He obtained his B.S. and Master's degree in Psychology from the University of Chicago and his Ph.D. in clinical psychology from the University of Michigan. During his masters, Dr. Kirk was associated with a little boy who had been labeled as 'word blind'. After sometime working with the kid, he developed an assessment method for identifying specific learning disabilities in children, and this was the beginning of his Career to be known as the 'Father of Special Education' (Lloyd, 2005).

Dr. Samuel is known now as the one who coined the term 'learning disabilities' and it was due to his speech at an education conference in Chicago in 1963, which had a massive impact on both his career and social policy. As a result, the Association for Children with Learning Disabilities was created, and it is recognized today with the name The Learning Disabilities

Association of America (LDA). (*History – Learning Disabilities Association of America*, n.d.). Dr.

Kirk's pioneering work garnered him an award from the Kennedy Family Foundation, and so he was appointed to the Federal Post by President John F. Kennedy, who had a mentally disabled sister (Jr, 1996).

As cited in *Illinois Distributed Museum's* article, in his most influential speech, Dr. Kirk defined learning disabilities as follows, "I have used the term 'learning disabilities' to describe a group of children who have disorders in development in language, speech, reading, and associated communication skills needed for social interaction. In this group I do not include children who have sensory handicaps such as blindness or deafness, because we have methods of managing and training the deaf and the blind. I also exclude from this group children who have generalized mental retardation." (Kirk 1963; NASET 2007).

In 1973, The Rehabilitation Act of 1973, a turning point in civil rights history, was adopted. It is a new law that replaced the legislation of vocational rehabilitation to revise its grants and services. Section 504 was dedicated to children, adult students, and employees with disabilities in education; it protected them in terms of discrimination and provided each one with accommodation and free education (*Part II: Federal Regulation Implementing Section 504, the Rehabilitation Act of 1973: Non-Discrimination on the Basis of Handicap* // SECTION 504 REGULATION // Download, 1977)

An article by Zettel & Ballard (1979), stated that The Education for All Handicapped Children Act EHA was passed in November of 1975 by the Congress of the United States. This legislation worked on guaranteeing that all children with learning disabilities should receive a "free, suitable public education". By the year 1978, it established a set of basic requirements for state and local education authorities to follow.

The EHA was reauthorized and renamed 'The Individuals with Disabilities Education Act' (IDEA) in 1990. It had three main adjustments which are: to emphasize the individual first as mentioned in the name; to classify students with autism and traumatic brain injury as one distinct category in order to be subjected to the law's privileges and the last change required students to have

a transition plan by the age of 16 (Kauffman et al., 2017, p. 57).

Not only the IDEA was passed, but one year after, The ‘Americans with Disabilities Act’ (ADA) was created too, it was defined by Blanck as “the most comprehensive federal civil rights law addressing discrimination against one-fifth of the American population” (1996). Hence, the ADA is a legislation based upon assuring safety from discrimination in employment for people with disabilities. “It will ensure that people with disabilities are given the basic guarantees for which they have worked so long and so hard: independence, freedom of choice, control of their lives, the opportunity to blend fully and equally into the rich mosaic of the American mainstream.”

-George H.W. Bush. (*A Timeline of Learning Disability History*, n.d.).

Eleven years later, The No Child Left Behind (NCLB) Act was enacted; it required states to enhance academic achievement levels for all kids, it necessitated that all pupils should have qualified teachers, and offered them the opportunity to attend high-quality schools, including students with learning disabilities (Simpson et al., 2004).

In a report by The City Club (2002) and after LDA started the Healthy Children Project (HCP) in the same year, the Executive Director of the Learning Disabilities Association of America (LDA, 2005). Jane Browning stated that the goal behind this program is to raise awareness among constituencies including parents, pregnant women, women who are willing to have children in the future and healthcare professionals who are constantly dealing with such situations; to make attentive customers who would seek for preventative strategies so they assure their own and others’ health.

In 2004, another version of IDEA was passed in which they introduced a new approach called Response-to-Intervention (RTI) : A multi-step strategy that closely observes how the learner responds to various sorts of services and instruction. This new process was created to provide help for students with learning disabilities and make more precise identification of whether students have learning disabilities or they only have been mistakenly identified with having them (National

Center for Learning Disabilities, 2006).

Recently, specifically in 2018, LDA advocated for the Juvenile Justice (Care and Protection of Children) Act, which was passed in 2015, to be reauthorized. A highly essential piece of legislation was enacted to ensure the security, protection, education, and well-being of children in need in India. (TARA, n.d.). As a result, Title V of the Juvenile Justice Act has been amended to provide Youth PROMISE funds, a federal legislation aimed at reducing youth violence, gang crime, and juvenile imprisonment. (The Cochrane Collaboration College for Policy, n.d.) in order to teach with more focus on reading, math, mental health services, and youth leadership development programs as a means to boost confidence in challenged youngsters. (*A Timeline of Learning Disability History*, n.d.)

Despite the support, education, and advocacy, one in five individuals (20 percent of 2019's population) have learning and attention issues in America, according to the U.S. Census bureau. (*The State of Learning Disabilities Today – Learning Disabilities Association of America*, n.d.). However, it is expected that around 2.5 percent of youngsters and 2.16 percent of adults in the United Kingdom have a learning disability. (*How Common Is Learning Disability?* n.d.)

Moreover, according to Statistics Canada (2017) 3.2 percent of Canadian children have a learning disability which equates to one child in every school bus full of children. Statistics Canada also reports that the number of children identified with a learning disorder increases by about 25 percent as they make the transition from preschool to school stage, even though these transition years are crucial for assessing children and beginning to accommodate individuals with learning disabilities so they can reach their full potential.

1.3 Types of Learning Disabilities

Children with learning difficulties exhibit a wide range of symptoms and indicators. In fact, despite professionals' efforts to divide and categorize learning disorders, it is still difficult to distinguish

between them due to the fact that one type may gather symptoms from other types. Foreexample, dyscalculia is a math-related learning condition; nevertheless, while dyslexia is considered a reading disability, it may also entail difficulties counting and understanding math. To further illustrate, the following list presents the different types of LDs.

1.3.1 Attention-Deficit Hyperactivity Disorder (ADHD)

Attention deficit hyperactivity disorder (ADHD) is a learning disability that is characterized by a continuous pattern (6 months or more) of inattention and/or hyperactivity-impulsivity that has a direct impact on academic, occupational, or social functioning. Another important observation was that inattention is perceived as a massive challenge in keeping attention to tasks that do not deliver a high degree of excitement or constant rewards. (*ICD-11 - Mortality and Morbidity Statistics*, n.d.)

Over the previous years of researching and trying to find logical explanations, scholars found that ADHD may have a genetic component. On the contrary, today's findings prove that it is the result of a developmental malfunction in the brain circuitry that underpins inhibition and self-control instead of the common belief that sees it as an attention impairment. It is evident from some studies that the majority of ADHD infants are hyperactive, distractible, and impulsive, whereas adults are more attentive to current events and less able to prioritize future events above more immediate wants. According to some studies, between 2 and 9.5 percent of all school-age children globally have ADHD, and boys are at least three times more likely than girls to have the disorder. In addition to what has already been mentioned, psychologists reported that children with ADHD are more likely to be more incompetent than normal children to control their physical reactions in response to stimuli such as loud noises and bright lights, and are more prone to make impulsive motor-related errors which, as a result, lead them to be hyperactive and impulsive. (Barkley, 1998, Faedda et al., 2019)

Concerning this disorder in Algeria, Soumeya Ben Amara 2017, in a study, investigated ADHD among 100 outstanding fourth-year students in the region of Ouargla and discovered that they do

not suffer from the disorder and that there are significant disparities in ADHD among them based on gender and subject studied.

1.3.2 Auditory Processing Disorder (APD)

According to Parthasarathy (2014), APD is an ancient concept, yet over the ten recent years, various researchers made an efficient contribution in understanding more the brain that produces auditory information, and through time, it has become an interesting topic to scholars in the field of communication disorders.

As cited in Haynes et al. in 2006, according to Flexer (1994), Auditory Processing Disorder (APD), also known as central auditory processing disorder, has no relationship with hearing sensitivity, instead, it is a problem caused by a lack of understanding of incoming sounds, particularly. The hearing system receives sounds in a very natural way; however the problem lies in the nervous system, i.e, the brain of a person with APD usually is unable to decode certain sounds. (Mülder et al., 2007)

1.3.3 Language Processing Disorder (LPD)

The Learning Disabilities Association described people with LPD as “Individuals with Oral / Written Language Disorder and Specific Reading Comprehension Deficit struggle with understanding and/or expressing language often in both oral and written forms.” (by, n.d.-b)

LPD is another type of learning disability characterized by having extreme trouble understanding what is being said due to taking so much effort listening, interpreting words (slow language mastery), or both. Although they seem similar, unlike auditory processing disorders; which impact the interpretation of all noises entering the brain, language processing disorder is narrower, it mainly impairs the processing of language itself (Singh et al., 2019)

This condition makes it difficult to read, spell, write, and even communicate. A person with LPD, for example, may have trouble understanding and delivering a joke or making a sarcastic

comment. This may irritate them, especially if they are unable to articulate their views and explain themselves to others in this regard, because mentioning this may seem strange to people who are not familiar with the disorder. (*What Is Language Processing Disorder?*, 2020)

1.2.3. Non-verbal Learning Disabilities

The term "nonverbal learning disability" refers to a well-defined pattern that includes high verbal skills abilities on one side and low visual-spatial skills on the other. (NVLD project, n.d.).

As cited in Little, L's paper (1999), Learning disabilities "are circumscribed deficiencies in a cognitive area in an otherwise intellectually average child or adolescent" (Johnson, 1995, pg.2). In reality, nonverbal communication is highly challenging for children with NVLD because nonverbal signals such as tone of voice, facial expression, posture, and body language transmit around 65% of information, yet they cannot comprehend such actions appropriately. (Nowicki & Duke, 1992; Thompson, 1997). In addition, People with NVLD usually struggle with organization, concentration, executive functioning, nonverbal communication, and motor skills. (NVLD project, n.d.)

1.2.4. Visual Perceptual/Visual Motor Deficit.

Visual-motor deficit is a condition that impacts children's capacity to decode data gathered by means of visualization as well as it affects the information that the brain processes, therefore, it prevents them from reading, copying what is written, or even drawing.

Based on a representative of LDs association's article it can be argued that although symptoms of this disorder can appear at any age, this problem may become more visible in the child after the age of seven, when he learns to read. It also argued that visual-motor deficit may affect many areas of the brain including

- **Visual Discrimination** (recognition of shapes, sizes, and colors).
- **Visual Sequential Memory** (memorizing a series of objects).
- **Visual Figure-Ground** (distinguishing an object from its background).

- **Visual-Spatial Skills** (comprehending and organizing external visual information).
- **Visual Closure** (recognizing a complete feature from fragmented information).
- **Visual Form Constancy** (recognizing objects as they change in shape and color).
- **Visual Memory** (retaining information acquired visually).

Aside from having the kid supported by a professional who can provide more effective education, developing a specific learning method for a child with visual processing impairment requires frequent, positive consultation. (Louis, n.d.)

1.2.5. Dysphasia

Also known as aphasia, is a language disorder characterized by the inability to perceive and process language resulting from brain damage. Dysphasia is a neurological language disorder rather than a speech one; since it is not involved with the process of articulation, such as difficulties with the tongue muscles that create words. Instead, it is closely related to brain dysfunction and can be caused by head traumas, tumors, strokes, and infections. (Albert et al., 2013). Dysphasia arises when several parts of the brain that are mainly responsible for decoding and functioning written and spoken language fail to function properly. As a result, it becomes difficult for dysphasia individuals to read, write, understand and communicate their thoughts and ideas using coherent language (WebMD Editorial Contributors, 2021)

1.2.6. Dysgraphia

Dysgraphia is a disorder that affects one's writing abilities; it is characterized by impairments with letter formation/legibility, letter spacing, spelling, fine motor coordination, pace of writing, grammar, and composition. Usually, Developed dysgraphia occurs as a result of brain damage, neurologic illness, or degenerative disorders, which lead to a loss of skills the person has already acquired (J et al., 2020).

In a research by Biotteau et al. (2019) they argued that Dysgraphia can be characterized by

plenty of other signs, including poor drawing or painting skills, difficulties with handwriting or typing, riding a bicycle, using scissors, and sport-related activities. Furthermore, in another research, it is stated that “Children with signs of dysgraphia write irregularly; their hands flow with difficulty on a writing surface; the handle of their writing medium is often incorrect; the positions of their bodies is inadequate in most cases; their elbows are not placed on the table; and their torsos are excessively inclined” (Dimauro et al., 2021).

1.2.7. Dyscalculia

Dyscalculia is defined as a coherent disorder characterized by a single core deficit by neurobehavioral and genetic studies. In an article by Trott, C. (2010). It is defined as a disorder affecting one's ability to learn arithmetic skills. Besides, dyscalculic students lack intuitive knowledge about numbers themselves, understanding their basic concepts and failing to master number facts and how they process, e.g. $6 + 4 = 10$. Although this disability may affect individuals with normal intellect and working memory, many dyscalculic people excel at geometry, statistics, and computer programming. It is also known that dyscalculia may subsequently occur with other deficiencies throughout time, such as reading disorders and attention deficit hyperactivity disorder (ADHD). (Butterworth et al. 2011). In addition, Dyscalculia may be followed by other Common symptoms, including making a link between a number and the quantity it represents, e.g., $2 =$ two apples; struggling when two amounts are compared; backwards and forwards counting; difficulty in reading a traditional clock's time; trouble in determining directions such as right and left, etc. Over and above, finger-counting and calculating errors are commonly associated with dyscalculia, nevertheless, they are not a definitive sign of the disorder (Frye, 2017).

1.2.8. Dyslexia

Unlike dyscalculia, dyslexia is a language-based learning disorder characterized by difficulty in the acquisition of reading, including inaccurate recognizing, decoding and spelling of words. It may be caused due to phonological component of language impairment, which is frequently

unanticipated in connection to other cognitive skills and the provision of effective classroom education (McArthur et al., 2013). Despite the differences of dyslexia and dyscalculia, they are both considered to be of neurobiological origin and are two of the reasons why children fail to acquire reading or mathematics' abilities (Landerl et al., 2009)

1.4 Learning Disabilities vs Mental Disabilities vs Intellectual Disabilities

People may often confuse between these three concepts, yet, they are completely different. Learning disabilities are conditions that include failure in academic skills like reading, writing doing math as well as some other daily life skills regardless of the individual's intelligence because they are mainly caused by "poor maintenance" in some parts of the brain. (Centers for disease control and prevention, 2020). Mental disorders (illnesses) are health issues that affect the human's inner self and can influence thoughts, feelings, mood, and behavior, such as depression, anxiety, bipolar disorder, paranoia, eating disorders, obsessive-compulsive disorder, etc. These psychological illnesses maybe curable or chronic, and they can damage an individual's daily interactions with others. (Mental Disorders, n.d.). Finally, intellectual disabilities or mental retardations are impairments characterized by cognitive functioning skills and below-average intelligence (IQ). According to Byrd's findings, such conditions typically affect communication, social life and self-care abilities because they have an extreme incompetence or slow learning of new skills. Down syndrome, Klinefelter syndrome, Williams syndrome, congenital hypothyroidism, and a variety of other intellectual disorders are examples of intellectual disability. Byrd (n.d.)

Conclusion

This chapter focused on defining learning disabilities, providing a historical overview of how scholars gradually investigated this field, how associations contributed to raising awareness and providing help for learning disabled children, presenting different types of LDs that may not be common in our daily lives, and finally clarifying the difference between three fields that are frequently difficult to distinguish

Although this chapter tried to cover what is meant by learning disorders and provided their types including dyslexia, the coming chapter however, will highlight further details about it since it is known to be the most common one in comparison to other LDS.

Chapter Two:

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Conclusion

Introduction

Dyslexia is one of the specific Learning Disabilities that can be tracked everywhere across the globe, and a large number of children worldwide suffer from it. However, cultures perceive it differently, and not all of them are able to provide dyslexic children with the right treatment to overcome it due to lack of instruction, ineffective school programs, and social unawareness, particularly in countries with a less developed healthcare system. Dyslexic children often go undiagnosed; henceforth, some societies do not even know what dyslexia is nor do they consider it a disability. Conversely, others consider it a severe condition that requires specific care or even a sign of intelligence. As a result, some dyslexic children are treated as failures, while others obtain support and succeed even though they struggle to read. The current chapter manifests the second theoretical part of the research as it will look in-depth at dyslexia by highlighting its types, symptoms, possible causes, consequences, and most importantly, the importance of parents and teachers to detect dyslexia in children.

2.1. Types of Dyslexia

Dyslexia, like many other disorders, can be either developmental or acquired. Developmental dyslexia occurs when a kid first begins to develop his reading abilities; however, acquired dyslexia, also known as alexia, is typically the consequence of a brain trauma such as an accident or stroke. (TEMPLE? 2006). It also has several types, which are listed below.

2.1.1 Surface Dyslexia

Surface, dysidetic or visual dyslexia, according to Marshall & Newcombe (1973), is a disorder characterized by difficulties in reading irregular words, i.e., words with exceptional structures and pronunciation that disobey the inflection patterns. For example, the term "have" in English is unique since it does not obey the constraints of grapheme-phoneme correspondences like "save" and "cave." However, even if they understand the rules properly, children with surface dyslexia would pronounce it as /heiv/ using the same way they would read a regular word. It can be natural

for a seven years old kid, yet, a problem for a ten years old kid who may carry this error into higher academic levels. In addition, Surface dyslexia includes having troubles with visual processing and working memory as children with this disorder often confuse between visually similar letters like p/q and b/d in English or ص/ض and ع/غ in Arabic. Fortunately, this type of dyslexia is easy to be detected through adopting a procedure in which the child is repeatedly given certain types of (Garforth, 2021).

Surface dyslexia does not occur in some languages, such as Spanish, since it does not include words with irregular pronunciation. Furthermore, children with this type of dyslexia have no difficulty reading non-existent or fictitious words, demonstrating that the impairment is more proportionate to a damage in either the visual channel or the direct access to words rather than the child's semantic capacity. Even if they cannot read the word correctly, they still can manage to

irregular words or similar letters and then examined on how he/she reads them. (Coltheart & comprehend it if it is uttered loudly and pronounced correctly. As a result, the impairment is restricted to the ability to read not to the ability to comprehend what is read. (أنواع من عسر القراءة / علم النفس 3, n.d.)

2.1.2 Phonological Dyslexia

Unlike surface dyslexia, in an article by Temple and Marshall (1983), it is defined that Phonological Dyslexia (also called auditory dyslexia or dysphonic dyslexia) is an acquired reading disorder. Children with this type of dyslexia have an almost normal ability to read words, but low to no capacity to read non-words, particularly reading pronounceable meaningless words aloud such as “fuf”, “donk”, “yot”, “slax”...etc. (*Avertissement de Redirection*, 2022). Auditory dyslexia also contains the child to confuse similar spelled words like “properly” and “probably” as well as it is directly related to hearing sounds and recognizing through hearing them. Consequently, if the child has problems in their ears, it might be why they have phonological dyslexia. (Learning Success, 2022)

In an interview, when a Professor of Cognitive Science from Macquarie University of Australia called Dr. Max Coltheart was asked about phonological dyslexia, based on an article he wrote, he defined it as a difficulty in learning phonics; he stated that,

These children will fail on any task that requires them to use letter-sound rules and there's only one way of

testing that which is to give them pseudo words to read nonsense words like “vib” and you find these children who can read plenty of real words then you give them “vib” they say that's not a word and you say I know it's not a word but how would you say it? They have no idea. (Dr. Coltheart 2021, 00:13)

Nevertheless, these children can actually understand that those combined sounds do not construct a cohesive, meaningful word since they do have a set of vocabulary in their heads which, as a result, contradicts the non-words they read. For them, the only way to read a word is to recognize its meaning. (Coltheart & Garforth, 2021b). Dr. Max continues to say, In many ways, this is the most disabling kind of reading problem because the way children learn to read is first of all by learning phonic rules and then sounding out words and so, if you're a six-year-old child you might know ten thousand words from speech so there are ten thousand different words if you say to the child what does such and such means they'll tell you. A six-year-old has a huge recovery of ten thousand words in speech but in print, this child has only just begun to learn to read so they might be only able to recognize 10 words in print and so, this is the most important fact there is about learning to read. The child will constantly come across words in print that the child's never seen before the child knows in speech so only if only a child could sound the word out they could use their knowledge of the spoken forms of words to figure out “ah! that's the word tree” so this child who's six knows the word tree when you say it to them but they've never seen the word tree before. If they know the rules they can go T-R-E-E Tree, that's the word tree! and this is a way in which children can teach themselves to read but you can only do that if you're really good at phonics and that's why being bad at phonics has got to be very, make learning to read very very difficult.” (Dr. Coltheart 2021, 00:57)

Dr. Max believes that learning to read necessitates the child's mastery of phonics. However, the difference lies in the ability of regular children to teach themselves versus the inability of phonologically dyslexic children to do so. Phonological dyslexia is considered a great difficulty due to the fact that these children have trouble learning the phonic rules. Therefore, they cannot teach themselves to read.

2.1.2. Attentional Dyslexia

This kind of dyslexia is similar to visual dyslexia in that, even when letters are correctly identified, children with this condition frequently see letters switch positions, especially the initial letters of each term.

Attentional dyslexic children, for example, would read "Wind King" as "Kind

2.1.2. Rapid Automatized Naming (RAN)

For the last three decades, rapid naming deficiency or Naming speed has been classified as another form of reading impairment in which children are not able to identify objects rapidly, such like numbers, letters, and colors on sight. Generally, children with this disease take a long time to name all of those elements in a row, which might be owing to processing speed (Georgiou et al., 2006). They also often say the wrong word when reading besides the slowness in reading and their low comprehension (Learning Success, 2022).

As cited in an article by Di Filippo et al., (2008), many researchers suggest that rapid naming deficits are ‘part of the phonological family’, on the other side, Kirby et al., (2010), believe that it is highly related to visual stimuli. Despite numerous results suggesting RAN is connected with reading ability, researchers concede that they still do not fully comprehend how RAN influences reading and how its influence evolves over time. (Georgiou et al., 2006)

2.1.3. Double Deficit Dyslexia

It is claimed that double deficit dyslexia exists and it is in fact, one of the hardest and most common types of dyslexia, which is a combination of two types of the any of the already mentioned ones, individuals with both of these deficits have higher reading impairments compared to those with only one impairment. (Learning Success, 2022) The double-deficit theory, according to Wolf and Bowers (2012), was presented not to fully explain all reading difficulties, but rather to move the research forward in understanding the multiple subtypes and etymologies of dyslexia. Many studies like the *Functional Neuroanatomical Evidence for the Double-Deficit Hypothesis of Developmental Dyslexia* have shown evidence for double deficit dyslexia not only in English but in many other languages as Dutch, Chinese, Greek and Finish which proves more the theory’s validity (Norton et al., 2014).

2.2. Symptoms of Dyslexia

Children with dyslexia exhibit various signs, as well as several abnormalities that might be detectable by either parent before the child enters school or teachers through observing them during reading practices and noticing that their achievement in reading is low in comparison to their classmates. Symptoms of dyslexia include;

2.2.1. Pre-school Phase Dyslexia

- Speech delay or slow speech development.
- Pronunciation difficulties e.g spelling spaghetti as busgetti.
- Issues in rhyming words.
- Inability of writing their own name.
- Problems with learning shapes and colors.
- Difficulties telling a story with the correct order of events.
- Poor listening or difficulty of paying attention skills.

2.2.2. During Primary School Dyslexia (5-12 years old)

- Inability to read a single word.
- Confusing letters like d and b, w and m.
- Writing words backwards such as writing 'pit' when the word 'tip' was intended.
- Problems with learning suffixes and prefixes.
- Avoiding reading out loud in classroom.
- Troubles in interacting with peers.(Mayo Clinic, 2017)

2.2.3. Dyslexia among High School Pupils

At this phase, teenagers may show symptoms like:

- Difficulties with summarizing a text.
- Inability of reading their own writing.
- Challenges with learning a second language.

- Poor spelling, including many misspellings of the same term in a single writing assignment.
- Not enjoying reading books.
- Bad memory.
- Avoiding tasks that involve writing and reading which may lead them to get someone else to write for them.
- Usually dyslexic people have great spatial ability and may be very talented at art skills like design, painting...etc. (*Dyslexia - Better Health Channel*, n.d.)

2.3.Causes of Dyslexia

Scientists have made huge efforts on conducting research in order to explain causes and factors that usually lead to dyslexia. based on research, even though most prominent causes of dyslexia are

One possible explanation of dyslexia is a malformation or malfunction in the left hemisphere of the brain. Reading, language, and speaking are all controlled by the left hemisphere of the brain. Perception, information processing, language, and memory can all be affected by a dysfunctional or congenital abnormality. The Broca and Wernicke areas (two important areas for the brain's language development) are in charge of sentence formulation and impulse transmission.

As cited in a paper by Shannon (1986), A similar cause of developmental dyslexia is switched cerebral dominance which is the natural predisposition of one side of the brain to control specific processes such as handedness and speaking (Oxford references, n.d.) If the left hemisphere is not sufficiently dominant, reading and language difficulties will result from a lack of hemispheric specialization (Ayers, 1969) i.e the function of the left or right brain side in processing a certain neural job or action (Manns, 2019). Reading and language abilities are obviously hampered by impaired sensory-motor integration as a result of a lack of specialization. The brain cannot process mixed inputs from both hemispheres. If messages are not accurately understood, it is possible that

the incorrect side of the brain handled the interpretation. Dyslexia may also be caused by late brain development. While males have slower brain development than females, growth is frequently equalized by the early school years. (Shannon, 1986)

Pathological delay in maturation, on the other hand, has been identified as a cause of reading and language difficulty. It should be emphasized that delayed maturation is frequently associated with subsequent impaired dominance difficulties within the brain. (Shannon, 1986)

As cited in the same research, it has also been identified that Cerebral biochemical imbalance is a contributing component to dyslexia. (Chase et al., 1984) A chemical imbalance in the brain occurs when the brain has either too many or too few chemical messengers or hormones called dopamine and serotonin. (Cafasso, 2021) . In this area, environmental toxicological factors have also been reported as having an impact on the chemical balance in the brain. One example from the literature is lead poisoning, which is transmitted from birth. Neuro pathway breakdown is caused by inefficiency in electrical connections in the brain.

In summary, the inappropriate chemical in the wrong spot produces a failure in the electrical connection associated with language and reading. Messages are lost in the Broca and Wernicke regions, nerve terminals "read" the erroneous messages, and neurons become confused. It becomes impossible to comprehend written information rationally. Dyslexia has been linked to brain injury before, during, or immediately after birth. This physiological harm might result in abnormal neuronal development and reduced linguistic ability. As previously indicated, one of the major causes of the dyslexia condition is dysfunction in the sensitive left cerebral cortex. (Shannon, 1986) To conclude what has been stated before, dyslexia had a wide range of hereditary reasons (Leong, 1982). However, in this case individuals with dyslexia can overcome the problem with the aid of physio neurologic therapy (Shannon, 1986).

2.4. Consequences of Dyslexia

Learning disorders, in general, and dyslexia, in particular, are not only associated with the individual's social and academic life but also with his mental health, and behavioral and emotional profile. Here we list some of the consequences of enduring dyslexia:

2.4.1 Impact of Dyslexia on Mental Health

As cited in a research conducted by Livingston et al., (2018), learning disabilities such as dyslexia have a detrimental influence on the human's well-being and quality of life, which might be attributed to accompanying emotions of worry and despair. They may as a result develop socio-emotional disorders like social phobia, generalized anxiety disorder (GAD), panic disorder and separation anxiety ((Smith et al., 2020, Kavale & Forness, 1996; Wiener & Schneider, 2002). For example, a study reported that 60 percent of individuals with dyslexia show psychiatric disorders like Schizophrenia, Bipolar disorder, depression, Borderline Personality Disorder. etc (Margari et al., 2013, Burnam et al., 1987)). Besides that, these children are more likely to have anxiety, depression, and to be socially withdrawn resulting in academic failure. (Willcutt & Pennington, 2000).

They are also shown to be twice as likely to experience mental distress, including higher risk of aggression and suicidal tendencies. (Svetaz, Ireland, & Blum, 2001). Most views on how dyslexia impacts people's mental health are negative because it is believed to be an obstacle to their achievement; unless they are aware and eventually decide to reframe their attitudes about their learning disability. (De Beer, Engels, Heerkens, & Heerkens 2014).

2.4.2. The Build-up of Stigma

Many educators are prejudiced against students with learning difficulties and classify them in the framework of less intelligent, lazy or difficult to teach (Lisle & Wade, 2014). Thus, this kind of negative attitude would undoubtedly influence how teachers educate and engage with their

pupils. Beyond that, individuals with developmental dyslexia can easily detect how others feel about them by observing their behaviors; as a natural consequence, they ignore their true abilities and focus on the ones society projects on them. They will focus on their inability to accomplish reading tasks, resulting in underestimating everything they do, even if it was brilliant (Butkowsky & Willows, 1980; Lockiewicz et al., 2014; Shifrer, 2013).

In one of the conducted researches, individuals with developmental dyslexia claimed that the stereotypes, attitudes, and assumptions connected with their dyslexia take a higher psychological burden than their specific language impairments (Denhart, 2008; McNulty, 2008). Furthermore, dyslexia is often related to challenges associated with attitudes of a society that celebrates ‘ability’ and stigmatizes ‘diversity’ (Leitão et al., 2017).

‘Stereotype threat’ has been demonstrated to decrease executive function which may worsen learning deficits. (Johns, Inzlicht, & Schmader, 2008). According to Lisle and Wade (2014), there are stereotypes involved with any learning impairment. In this case, the disclosure of invisible disorders such as dyslexia in the work setting, for instance, may have consequences for health, relationships, and performance. It was concluded that teachers and professionals must be more aware of what it is like to live with dyslexia because, in another study, teachers with special education training reported higher levels of optimism and self-efficacy in their capacity to serve students with learning difficulties (Levi, Einav, Raskind, Ziv, & Margalit, 2013). Riddick (2010) views that the effects of being labeled with dyslexia, may result in stigma rather than the diagnosis itself. Therefore, he suggested that, when identifying and explaining dyslexic students, professionals must be compassionate because poor explanations can definitely lead to negative self-esteem and make individuals feel anxious and inferior.

2.4.3. Impact on Self-esteem

Self-esteem is one of the most crucial aspects of an individual’s psychosocial functioning, mental wellbeing, and social survival (Nalavany & Carawan, 2011; Daderman et al., 2014). Individuals who are dyslexic, on the other hand, tend to internalize their struggles as a reflection

of their competence. Consequently, low self-esteem is strongly associated with a high prevalence of social, emotional, and behavioral issues (Terras et al., 2009). These issues are mainly caused by parents and tutors who frequently doubt dyslexics' work ethics and intelligence. Doubting their cleverness leads to poor academic self-concept which makes them undermine their belief in their talents and motivation to learn (Butkowsky & Willows, 1980; Undheim, 2003). It even prevents them from making relationships with peers (Humphrey & Mullins, 2004).

2.4.4. Increasing Behavioral Problems

Margari et al. (2013), and Huc-Chabrolle et al. (2010) reported that individuals with developmental dyslexia have three times more behavioral disorders and a high incidence of ADHD than those without. Additionally, one of the most common problems that occur to dyslexic children is aggression stemming from frustration with school or social circumstances which typically leads to rage. According to many social scientists, anger and aggression are observed largely in dyslexic children. (*What Does the Person with Dyslexia Feel?*, n.d.) Therefore, these issues are seen to decrease parents' and teachers' abilities and desire to help, besides impacting school and relationships negatively. (Kempe, Gustafson, & Samuelsson, 2011)

2.4.5. Escalating Social Problems

According to a variety of researches, developmental dyslexia is observed to be a main cause or appears to be related to social problems such as self-regulation, and social interaction (De Beer et al., 2014; Kempe et al., 2011). Dyslexia may also bring social anxiety in both adults and children (Carroll & Iles, 2006; Mammarella et al., 2014; Terras et al., 2009), discrimination, ridicule (Morris & Turnbull, 2006), bullying (Lisle & Wade, 2014), higher rates of victimization, and problems finding friends or establishing relationships (Lisle & Wade, 2014).

Although some learning difficulties may be accompanied by social issues that lead to internalizing behaviors i.e. negative behaviors that damage the inner self like feeling depressed, irritated, unwanted, lonely, etc. individuals with different types of learning disabilities may exhibit them, as well as externalizing behaviors, which is the opposite of internalizing behaviors, meaning, they target the other rather than the self like bullying, aggression, rebellion, etc. (Wiener, 2004).

2.5. Importance of Detecting Dyslexia at an Early Age

Detecting learning disorders such as dyslexia at an early age is very important because children who lack these essential language abilities may face unavoidable and lasting scholastic, social and economic challenges that may lead to very harsh struggles in life. (*The Importance of Early Detection of Dyslexia* | *UT Permian Basin Online*, 2020)

In an a recorded interview on Youtube with Jack Fletcher, a Professor of Psychology at the University of Houston stated that,

Early [intervention](#) is very important because in many instances of effective instruction, we can prevent [dyslexia](#). It includes early [screening](#) because in order to identify children who are at risk we need to identify them early and introduce effective instruction at a time when we can really optimize a child's access to print. It's much better to intervene earlier than to wait until the child actually fails because remediation is demonstrably less effective. (National Center on Improving Literacy, 2019: 00:01)

He also pointed out that, in a study by Maureen Lovett, she discovered that delivering children in first, and second grades would have had almost twice better outcomes than delivering them in third grade.

Dr. Fletcher (2019) argued that in order for the individual to be a reader who can recognize the whole word, he must encounter print early and gain extensive print exposure since this strategy helps the brain to program the systems required for automatic reading. On the other hand, Mr. Jack reinforces this argument by noting that, "If you don't get early intervention and you wait to fail or if you get early intervention and you still struggle, those systems don't develop well; and it's very difficult to get the exposure needed to make those brain systems work." (2019, 01:25)

2.6. Positive Aspects of Dyslexia

Despite the negative aspects of dyslexia that may impact a person's life, we cannot deny that it also has a bright side that should be highlighted to help maximize the child's potential instead of limiting him/her by society's narratives about success standards.

Dyslexia affected some of the world's greatest minds, including Albert Einstein (S.S, 1992) and Leonardo Da Vinci (Aaron & Clouse, 1982), as well as entrepreneurs like Walt Disney (Hanning, 2016), celebrities like Orlando bloom (Bloom, 2014), and billionaires like Richard Branson (Branson, 2018)

To confirm that, here are some common advantages of dyslexia that are reported by studies and successful dyslexics;

2.6.1. Sports

Sports, according to an article entitled "Dyslexia and Sports: How Cognitive Issues Can Lead to On-Field Achievements," are an excellent outlet for children who struggle with dyslexia in school. Regardless that athletics are beneficial to all children, those with cognitive challenges, such as dyslexia, benefit the most both on and off the field. Baseball, football, pickle ball, track, and soccer, for example. It is very important to remind youngsters with dyslexia that they can excel at anything even if they struggle in school. It is an excellent method to boost self-esteem and carry it to the classroom, where morale is high due to continued success on and off the field. (News, 2018)

2.6.2. Strong Memory for Stories

Some people with dyslexia remember details as if they were reading a novel, rather than stating a collection of data due to them having narrative reasoning which may aid in memory improvement and improved integration of contextual information. Narrative thinking is one of the excellent skills for acting and writing. (*The Many Strengths of Dyslexics*, n.d.)

2.6.3. Imagination

Dyslexics have a terrific imagination and may have a fantastic perception of the world. All artists, actors, and novelists with dyslexia tend to utilize their imaginations extensively. They are full of curiosity and enthusiasm. (*The Many Strengths of Dyslexics*, n.d.)

2.6.4. Story Analysis

Instead of reading, dyslexic kids might go forward by analyzing the stories that are told to them or read aloud to them. Despite having friends, relatives, or text-to-speech technology read for them,

they generally grasp the storyline and tale owing their great spoken language comprehension

2.6.5. Empathy

Regarding their personalities, many dyslexics are fairly truthful. The reading and writing obstacles may as well make them feel more compassionate and empathetic toward others who may be struggling. (*The Many Strengths of Dyslexics*, n.d.)

2.6.6. Spatial Reasoning

Young dyslexics exceed non-dyslexics in recalling a virtual world, according to researchers at the University of East London. Many dyslexics achieve success in disciplines such as engineering, industrial and graphic design, architecture, and construction due to their great spatial intelligence (*The Many Strengths of Dyslexics*, n.d.).

2.6.7. Puzzle-solving Skills

Even though dyslexics have difficulty reading, many are great at puzzle solving. They can detect the correct shape and solve complex problems that no one else can. Many dyslexics thrive in circumstances that promote and encourage simultaneous thinking, in which ideas are linked by multiple paths instead of a straight line, rather than being a sequential thinker who moves from one notion to the next. This explains why there are so many dyslexic entrepreneurs (*The Many Strengths of Dyslexics*, n.d.).

2.6.8. Critical Thinking

Another characteristic shared by certain dyslexics is the capacity to apply rationality. They understand the distinction between two topics and will apply critical thinking to solve an issue. Besides, dyslexic children usually have the capacity to think out of the box because they tend to come up with amazing, unconventional concepts that are not just unique, but also beneficial. (*The Many Strengths of Dyslexics*, n.d.)

Conclusion

The current chapter went into depth on what dyslexia is as a disorder, its numerous types, its symptoms in preschool, school and adulthood, and its detrimental impacts on individuals. Furthermore, this chapter emphasized the significance of early diagnosing or at least detecting the dyslexic child at a young age in order for him/her to avoid further mental complications caused by dyslexia. Finally, we underlined how dyslexia may allow children to excel in many skills apart from reading and we stressed the necessity for any society to be aware enough to support such children and their talents rather than attempting to mold them according to what success means to us and our culture.

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The practical part of the study: Description and analysis of primary school questionnaire and psychologists' interview

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Introduction

This chapter, divided into two sections, provides the practical part of this research, which aims to analyze primary school teachers' perspectives on learning disorders; specifically dyslexia. It will include a description of a questionnaire that investigates whether or not there is detection and awareness of the matter, a description of an interview with experts, and finally, comparison and contrast in order to have a complete analysis in the end.

3.1 Data collection tools and methodology

Since the aim of this study is to investigate learning disorders among primary school children, the researcher adopted the mixed-method approach in order to determine learning disorders, and explore quality in a group of learners, by collecting information from their teachers via a questionnaire besides interviewing experts in the child therapy (pedo-psychology) field.

The questionnaire is chosen by the researcher as a data collection tool because it was the most appropriate, quick, and accessible instrument. Furthermore, available for gathering information from a decent number of instructors in the most cost-effective manner. The interview, however, was preferred due to the fact that the researcher had some networking skills that allowed her to easily contact psychologists. As well It was the most professional method for them to express themselves as people who may have a lot of responsibilities and may not have time to write about their experiences and opinions. Thus, it was chosen on the basis that they were not required to do so throughout the interview.

The questionnaire was administered to the primary school teachers of Mouloud Feroun, Guelma. The reason behind choosing this primary school is the fact that it is one of the biggest, well-reputed, prestigious and most ancient schools in Guelma, which led the researcher to assume that it might be a valid example. This Elementary school is located on "Avenue Ali Cherfi 'CHORFI'" and it is also known as "la Gare School" by locals since it was originally located near Guelma's

old train station. It was established in 1955 and has a total area of 2000 square meters.

According to the most recent statistics, it contains 14 teachers, 367 pupils, and 06 administrative employees, including the director.

In regards to data collection procedures, there was no direct interaction between the researcher and the sample because the school director was in charge of distributing the questionnaire and returning it to the researcher days after it has been given. That is to say, the researcher had no impact on their answers by any means (not even guidelines), therefore, They responded unsystematically.

The interview on the other hand was conducted over two days, the researcher was oriented by a friend who is a teacher at the department of psychology to other clinical experts in psychology who work as teachers at the university, are employed as psychologists, and guidance counselors in the educational sphere. The first two were available on the first day, yet the third one was occupied with her supervisee and preferred to arrange a formal meeting on the next day.

3.2 Description of the questionnaire

The questionnaire was provided to fourteen teachers at Mouloud Feroun Elementary School in Guelma, Algeria. It was designed to obtain basic information about primary school teachers, and their teaching experience, to analyze their perspectives on learning disorders; specifically dyslexia, and to investigate to what extent there is detection and awareness of the matter, as well as whether they are working to improve children's academic lives. Most importantly, it aims to answer the question of whether dyslexia is detected in primary schools or not. The questionnaire comprised 23 questions that were presented in a sequence of general to specific. It includes three types of questions because the researcher intended to make it easier for teachers in order for them to stay consistent and answer all the questions.

3.2.1. Section one: Background Information (Q1-Q2)

Following the rule that the initial questions should be basic and answerable, the first two

questions of this research focus on two crucial elements of teachers' careers: their educational degree and years of experience.

3.2.2. Section Two: Teachers' experience with learning disorders (dyslexia) (Q3-Q11)

The second section looks into whether teachers are knowledgeable enough about learning difficulties and whether they have encountered them in children throughout their career as primary school teachers. In Q3, the sample is asked a direct yes or no question to determine if they faced pupils with learning disabilities in the classroom. Q4 requires the sample to select a proportion of those youngsters ranging from 5 to 50%. In Q5, the subject is given a list of possible learning disorders and asked to select the ones that they are familiar with. The following question Q6 attempts to identify whether the learning-challenged children who were involved, grow agitated when requested to read aloud or write on the board. Q7 requires the sample to state the main usual ways those children express their annoyance with. Q8 however, asks about the subject's own opinion if they believe that some children take a long time in learning compared to others. For Q9, teachers are questioned about the skills that they think those unprivileged kids fail to complete. While getting more specific about one particular disorder, Q10 aims to ask whether or not dyslexia in children influences their academic performance. In case they answered with a yes, in Q11 the sample was given a list of signs of poor performance in which they are asked to select the ones observed the most.

3.2.3. Section Three: Detection of learning disorders, specifically dyslexia (Q12- Q23)

The third section evaluates if the study's sample is educated, has an intellectual attitude, and has the necessary tools (human resources aka school psychologists) and empathy to recognize dyslexia in their pupils. Q12 is a yes or no question that aims to discover whether the sample has attended seminars dedicated to educating teachers and raising awareness about learning disorders in children. If the answer was yes, Q13 confirms their answers by requiring them to report what they learned or dealt with in such seminars if they did attend. One of the most fundamental

questions is Q14, which asks the sample if there is a school psychologist accessible in the elementary schools where they work/have worked depending on their years of experience. In Q15, teachers who answered positively are asked if they had direct contact with that psychologist. With a yes/no question, Q16 seeks teacher viewpoints on whether school psychologists are necessary for all elementary schools, followed by Q17 which requires them to justify their answers in both cases. Q18 is a multiple-choice question in which the sample is asked if they contact their pupils' parents individually in order to keep them updated on their children's performance, inform them about their classroom behaviors and attitudes toward learning skills, and observe if something problematic is going with them. Q19 asks the subjects whether they have ever directed or guided parents to consult their children and have them diagnosed because of an issue they detected. In Q20, they are asked if the action they took was effective. For Q21, educators must choose one or more of the main factors from the suggested ones they feel are responsible for youngsters becoming dyslexic, dysgraphic, or hyperactive in the classroom; they may also provide other reasons they believe are responsible for such learning difficulties. Q22 asks the participants about their personal methods in dealing with a dyslexic child in the classroom. Finally, the concluding question 23 aims at providing free space for teachers to add a comment or express anything they wish to be concerned with the topic.

3.3 Analysis of the results

3.3.1. Section one: Background Information (Q1-Q2)

Q1. What is your educational level?

Education level	University	Secondary school	Institute	Higher school of education
Number of teachers	11	00	02	01
Percentage	79 %	00%	14 %	07 %

Table 01: Teacher's educational degree

The sample had some to a limited variation in regards to educational level, with 79% of teachers being university graduates, 14 % graduating from an institute, only 07% graduating from a higher school of education, and none graduating from secondary school. This demonstrates that according to their high education, these primary school teachers are supposed to know what learning disorders are and what dyslexia is apart from their work experience.

Q2. How many years of experience do you have in primary education?

Years of experience	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	Total
Number of teachers	01	05	03	01	01	01	02	00	14
Percentage	07 %	36 %	21 %	07%	07 %	07 %	14 %	00%	100%

Table02: Teacher's Work experience

In terms of work experience, the sample represented a wide range. However, the majority of them, 36%, are classified as having from 5 to 10 years of experience, 21% as having from 10 to 15 years, and 14% as having the most experience, which is from 30 to 35 years. 7% (one teacher) is observed in all of the categories of 25-30, 20-25, and 1-5 years of experience. This data shows that there are more young teachers than senior teachers based on their experience which might be seen as they are more conscious of aspects of children's psychology and are more conversant with scientific words than older instructors from the previous generation.

3.3.2. Section two: Teachers' experience with learning disorders (dyslexia) (Q3-Q11)

Q3. Have you ever dealt with children with learning disabilities?

Answers	Yes	No	Total
Number of teachers	14	00	14
Percentage	100 %	00 %	100%

Table 03: Teacher's encounter with learning disorders in children

Whether they had much or little experience, 100 % of this primary school teachers have dealt with children who had learning disorders at some stage in their careers. This table, however, may have more than one interpretation because on one hand even if the question was presented on the basis that learning disorders are serious psychological or neurological impairments, it does not guarantee that teachers completely understand what was meant by the question since any person, not only teachers, can detect a slow learning child, but does this make him dyslexic for example? Or is it just due to a lack of practice?. On the other hand, the table may indicate that the number of children with learning disorders is sizable, to the extent that all had to deal with this issue in children.

Q4. If the answer was yes, what is their percentage approximately in each classroom

Approximate percentage of children with LDs	05 %- 10 %	10 %-30 %	30 %-50 %	Total
Number of teachers	10	04	00	14
Percentage	71 %	29 %	00 %	100%

Table04: The approximate percentage of children with learning disorders in each classroom

Despite the fact that they exist in every primary classroom, according to the responses of this school's subjects, around 5% to 10% of the students in each classroom suffer from learning disabilities; however, 29% of them claimed that it is more than 10 %, instead, their proportion may range from 10% to 30% in each classroom. This demonstrates that Learning disordered children

comprise a small to an average number in classrooms. Therefore, detecting and looking after them is not considered a hard task.

Q5: Identify the disabilities you dealt with.

Given disorders	Number of teachers	percentage
Dyslexia	13	93%
Dysgraphia	11	79%
Dysphasia	09	64%
Dyscalculia	08	57%
Spelling difficulties	12	85%
ADHD	11	79%
Difficulty in concentrating	09	64%
Auditory processing disorder	01	07%
Language processing disorder	03	21%
Visual processing disorder	06	43%
Nonverbal learning disorder	02	14%

Table05: The percentage of the most common Learning disorders

After providing the teachers with the possible learning disorders that children may suffer from, dyslexia ranked first with a percentage of 93, followed by spelling difficulties with 85%. Dysgraphia and ADHD were opted for by 79% while Dysphasia and Concentration problems with 64 percent. 57 percent of teachers picked Dyscalculia to be one of the common disorders they encounter when engaging with children in the classroom. Almost half of the instructors (43%) believe that some of their pupils may have visual processing impairments, on the other hand, 21 percent of them chose language processing disorders. Only a small minority of tutors that make up the percentages of 7% and 14% respectively consider that nonverbal learning disorders and auditory processing disorders may be included in the challenges children confront during learning.

The focus was on dyslexia, spelling problems, dysgraphia, and ADHD. This figure shows that there is a

high rate of the mentioned disorders which means that teachers and parents should give it more importance

Q6. Do you think those children get angry when you ask them to read out loud or write on the board?

Answers	Yes	No	Total
Number of teachers	14	00	14
percentage	100%	00%	100%

Table06: Expressing anger among children with learning disorders

100% of the questioned teachers responded with yes, indicating the fact that all of them agree that children with learning disorders, mainly dyslexia, and dysgraphia usually become upset when they are required to read or write on the board. This supports the hypothesis that children with dyslexia can develop emotional problems such as anger, anxiety, and frustration as a result of the situations they might face either in a social or academic context. (It implies itself to other disorders not only dyslexia.)

Q7. In case the answer was yes, how do they express their anger?

Answers of the sample

- Rejection from the very beginning
- Silence

- Stopping to read
- Crying
- Facial expressions
- Unwillingness to read owing to their awareness of their inability
- Not looking at the teacher's face
- Hiding themselves behind their classmates
- Not reacting at all
- Not raising their hands to answer
- Stumbling on their way to the board
- Standing for too long next to the board looking for help from their colleagues

To learn more about the matter, teachers were asked how children express their dissatisfaction when requested to read or write individually, and the majority of their responses were "total rejection of reading or writing" and "silence." In addition to these two responses, the subjects answered with the reactions stated above. This statistic not only confirms what was discussed in the theoretical part, but it also explains how primary school educators may identify that a child may have a problem even if they cannot name it specifically.

Q.8 According to your experience, do you personally think some pupils learn slower than others?

Answers	Yes	No	Total
Number of teachers	14	00	14
percentage	100 %	00 %	100%

Table07: Pupils differences in learning

All instructors (100%) agreed that some children take longer to acquire new material than others. It demonstrates that teachers are aware that children's skills vary. Yet, it is difficult to guarantee that such teachers understand that sluggish learning might be attributed to a number of factors before classifying such children as stupid, lazy, or abandoned by their parents. This is one of the major assumptions upon which this questionnaire is based and aims to clarify throughout the following questions.

Q.9 In case the answer was yes, what skills do they fail at the most?

The sample had a free space in which they were required to answer. Most tutors responded with reading and writing, while some stated both with adding mathematics as a third skill, but generally, they matched the proportion given above, confirming that these are the most prevalent challenges among children.

Q10. Do you think dyslexia affects pupils' marks?

Answers	Yes	No	Total
Number of teachers	14	00	14
percentage	100 %	00 %	100%

Table08: The negative impact of dyslexia on children's academic performance

100% of the sample agreed that Dyslexia has an impact on children in school. Indeed, dyslexia impacts children on many levels, including basic daily living skills such as shoe tying, social concerns such as communication problems, and academic challenges that may result in dropping out of school. This table illustrates that the study's sample is adequately knowledgeable about the fact that they teach a minority of children with varied brain functions. In other words, they are aware of the consequences of dyslexia, but it is unclear whether they carry out their duties on this premise. Are they tolerant enough to treat them according to their conditions? Do they notice the differences and attempt to improve their

pupil's performance by seeking assistance or at least contacting the children's parents to let them know? These are the next questions to be answered.

Q.11 In case the answer was yes, how? (you can select more than one)

Options	Frequency	percentage
Taking low marks in exams	10	71%
failure to complete answering the exam before the time expires	12	86%
Inability to comprehend questions quickly and effectively	12	86%
Taking so much time to copy answers on the exam paper	08	57%
Total	14	100%

Table09: the main effects of dyslexia in the academic context

This question seeks to emphasize the consequences of dyslexia in the classroom. 86% of the subjects feel that dyslexia can prevent pupils from finishing exams on time because they struggle with reading and are unable to write what they do not understand. Another 86% selected children's incapacity to comprehend questions again, due to their difficulty to read. As revealed by 57% of the respondents, dyslexic children spend a long time copying their answers on exam papers, which inevitably leads to low grades as 71% of teachers stated. In this case, the teacher is not only expected to detect his/her dyslexic pupils only but also to make attempts to get them on the same page as their colleagues, because adopting the same techniques of examination with all students may appear unjust to them. For example, approaching them individually during the exam and reading the questions again for them or examining them orally

instead of making them write their answers since exams rely more on the information children provide.

3.3.3. Section Three: Teachers' experience with the psychological context in primary schools (Q12-Q23)

Q12. Have you ever attended seminars concerned about raising awareness about learning disorders?

Answers	Yes	No	Total
umber of teachers	02	12	14
percentage	14%	86 %	100%

Table10: Teacher's seminars about learning disorders

According to the data this table provides, only 02% of teachers answered positively while the majority of them (86%) answered negatively. This demonstrates that in spite of the scientific and cognitive development, we as humans reached today, it is clear that our society does not value the fact that children are the world's and the country's investment. In fact, this is a very dangerous act to do because if we do not stop this attitude, our ignorance will result in thousands of victims dropping out of school, and our downfall as a nation will occur eventually.

Q13. If the answer was yes, summarize what have you dealt with in such seminars?

The two remained teachers who responded that they did attend seminars about learning Disorders, answered as follows:

- Focusing on repetition in the pedagogical treatment (rectification sessions)

The seminars focus more on studying the social status of the child, such as whether heis an orphan or has divorced parents.

- On the physical side, they usually focus on the child's hygiene, feeding, and if the kid has a physical condition.

The researcher concluded from these responses that these seminars often focus on the materialistic aspects of school such as lighting and heating equipment, teaching materials such as a ruler, cos, protractor, chalk, etc. However, the child's psychological component is rarely acknowledged and discussed, despite the fact that it is a critical factor that must be addressed.

Q14. Based on your professional experience, do always schools that you work in (including this one) have a psychologist, child psychologist, or guidance counselor, dedicated to helping the kids?

Answers	Yes	No	May be	Total
Number of teachers	05	06	03	14
percentage	36%	43 %	21%	100%

Table11: The presence of psychologists in primary schools

Primary school teachers were given an additional column including a "maybe" in this figure. As a result, 36% of them responded yes, indicating that they may have encountered an issue with one of their pupils that necessitated the aid of a psychologist, had a conversation with her/him; or were informed by means of their coworkers that there was a psychologist in the schools they worked in. However, 43% said no, meaning that they had never worked with the school psychologist or that he/she simply did never exist. The remaining 21% chose "maybe," which explains that the psychologist probably had many responsibilities to the extent where he/she rarely showed up, the teacher heard about his/her presence but never met him/her in person, or because these teachers worked in different primary schools, psychologists probably existed in some but not in others.

Q.15 In case the answer was yes (05 teachers), are you and your pupils in personal contact with the School psychologist?

Answers	Yes	No	Total
Number of teachers who said yes	03	02	05
percentage	60 %	40 %	100%

Table12: The personal contact of the school psychologist with teachers and pupils

Only 36% of the total number of teachers investigated in table 11 were examined in this table; nevertheless, 60% of them responded positively which is a good sign because, despite their small number, they are making efforts to enhance their pupils' performance which will result in positive progress. On the other hand, 40% of them responded negatively implying that even if they had the opportunity to make a change, perhaps there was a lack of awareness or they did not have the time or energy to do so because, according to their answers, 100% of classrooms included children with learning disorders, making it contradictory to claim that they have no cases of certain children in their classrooms.

Answers	Yes	No	Total
Number	03	11	14
percentage	21%	79%	100%

Table13: The personal contact of the school psychologist with teachers and pupils in comparison to the total number of the sample.

The number of teachers in touch with the school psychologist is fairly small in contrast to the total number of educators due to two main reasons, including the shortage of psychologists in every school, if not a lack of knowledge and empathy among teachers.

Q16. Do you think the presence of a psychologist in every primary school is a must?

Answers	Yes	No	Total
Number	13	01	14
percentage	93%	7%	100%

Table14: The importance of a psychologist in each primary school

In this figure, the majority of the subjects (93 %) responded with yes, demonstrating that they believe teachers are unable to detect learning disorders, mental disorders, or anything related to the child's psyche as the psychologist may assist them at least in identifying the essential principles of the child's behavior, in which teachers may have sessions or seminars concerned with not only awareness but techniques of treating children in various situations, most likely gives them tests and measurements to detect and guide children in the most suitable way, otherwise, reaching out to him/her personally to provide them with help or consult the child who may have problems. Only 7% of the subjects claim that teachers are actually capable of recognizing if the child is having learning problems. The difference, though, is in how to help them enhance their performance rather than simply acknowledging their difficulties. Because when a school therapist is available, it would be easier and more efficient to make kids overcome their difficulties, especially with constant assessment whereas, even when the teacher is aware enough, he/she may face obstacles in providing help, for example, If a teacher alerts parents who may neglect him/her or take the issue carelessly, it will take the teacher a long time and effort to make even the minimal improvement.

Q17. Justify your answer

With the exception of one instructor who indicated that there is no urgent need for school psychologists. The majority of teachers argued that a child's character is usually concealed. As a result, a school psychologist might be very useful in tracking their psychological state, as they can quickly establish a diagnosis with little effort, unlike parents and instructors.

Q18. Do you usually contact your pupils' parents to inform them about their children's psychological conditions and behaviors inside the classroom?

Answers	Yes	No	occasionally	Total
Number	12	00	02	14
percentage	86%	00%	14%	100%

Table15: The contact between teachers and parents

This question attempts to investigate the real-life communication between teachers and parents by asking teachers if they contact parents to inform them about their children's performance. The majority of them (86%) claimed that they do call their pupils' parents, indicating that Instructors make attempts to either learn more about the kid in order to advise them in the classroom or to inform parents about behavior or feature they observed in the child in order to understand how the child's environment and home life is and, as a result, have an opportunity to discover why she/he acts that way they do. None of the teachers (00%) said no, which is an encouraging indicator that, despite the challenges, they believe parents can make a huge contribution in helping their children succeed. Only 14% of the sample chose "occasionally," indicating that some instructors may be hesitant owing to parental dishonesty regarding the kid's illness or their fear of being accused by the parent that it is the teacher's responsibility that his child is failing. As a consequence, the instructor makes every effort to avoid contacting parents unless it is absolutely

necessary.

Q19. Have you ever oriented parents to consult their child with a psychologist?

Answers	Yes	No	Total
Number of teachers	13	01	14
percentage	93%	07%	100%

Table16: Teacher’s orientation to parents

When they notice a child with poor behavioral or academic outcomes, 93% of respondents said they encourage the child's parents to have the child diagnosed at a therapist since school psychologists are unavailable, making it the most efficient option a teacher can make in this regard. However, only 7% said no, indicating a concern about being blamed by parents instead of receiving help.

Answers	Yes	No	Total
Number of teachers who answered yes	12	01	13
percentage	92%	08%	100%

Table17: The benefits of consulting the child with learning disorders

Q21. Based on your experience with children, who do you consider is most responsible if a child is unable to read or write in the classroom? (you can choose more than one)

Answers	Parental neglect	Child's laziness	Intensive educational program	The hard information received by the child compared to his intellectual level	Other	Total
Number of teachers	12	08	10	09	08	14
Percentage	86%	57%	71%	64%	57%	100%

Table18: Teachers' attitudes toward dyslexia

This question was implicitly asked to observe teachers' attitudes and expectations toward dyslexia, consequently, 86 percent of respondents agreed that parental neglect is one of the most responsible aspects that children are not able to have reading and writing skills. Indeed; parental neglect exists, yet, scientifically speaking, the causes of dyslexia are still not 100 percent clear, Therefore, in this case, in particular, teachers do not have the authority to condemn parents because they lack knowledge of how these parents are raising their kids and how much efforts they are making to be good parents. 57 percent of the subjects selected child laziness, this indicates that teachers need to be educated more about dyslexia and how children's brains function in order to deal with the frustration that may make them seem lazy because for them, refusing to read is not laziness but a form of defense mechanism that would easily solve their problem. 71 percent responded with an Intensive educational program and 64 percent with hard information received by the child compared to his intellectual level. Moreover, they were also asked to mention what other factors they think are also responsible and they answered as follows:

- Mental illnesses
- Living far from school
- Low standard of living
- Automatic transition from first to the second year of primary education

- Dryness of texts due to their lack of excitement and fun
- Absence of reading sessions due to the limited time

These factors highly contribute to worsening dyslexic kids' situation, however, they are not the leading causes individuals may have dyslexia. The educational system for instance is not flexible enough to be accessible to all people because first, it is based on limited tasks that determine success, and second, it is not designed to fulfill the requirements of all pupils, including dyslexic students, in an equal way.

Q22. How do you personally deal with children who suffer from dyslexia in the classroom?

According to the respondents, they stated they use different methods for helping children to overcome dyslexia including giving them more time and effort, allocating them to pedagogical treatment classes in which they dedicate one or two sessions per week, liberate all pupils with the exception of those whom teachers think are struggling, and try to help them with their struggles in reading and writing through vocal processing training by cutting words and producing sounds and compounding and replacing letters for more correct spelling in order to elevate them to their classmates' level and make balance in the classroom.

Q23. If you have any comments or additions, you can include them. Thank you very much.

The purpose of this question was to offer the population of this questionnaire complete freedom to express their opinions and thoughts, make comments, or even criticize the question provided; however, none of them opted to react, most likely because they probably were too busy or they just chose to remain neutral. In both ways, their previous responses were appreciated.

3.4 Description of the interview

This interview was conducted with three psychologists of Guelma. These specialists were found in the department of psychology of Guelma because besides working in the field as therapists, they are also teachers at the University. Further, it was conducted in Arabic and was translated into English due to the fact that the field of psychology is taught in Arabic and even

though some of them speak French, it is almost impossible to find Algerian psychologists who master English. This interview contained ten questions that the researcher tried to match with the questionnaire and the research needs. The procedure of this interview took a period of two days because not all of them were available on the first day, therefore, an appointment was arranged in order to meet the third therapist.

Since the study question seeks to determine if dyslexia is detectable or not, the first three questions sought to determine whether dyslexia is difficult to diagnose and how teachers and parents can discover it in children. The fourth, fifth, sixth, and seventh questions focused on asking how to help such children, where can parents and teachers obtain the appropriate knowledge to help them, the consequences of not being aware if the child was dyslexic, and the negative impact of learning disorders on the child's psychological, social and academic level. However, the last three questions focused on viewing parents' attitudes toward learning disorders mainly dyslexia through the eyes of professionals. Including asking them about parent awareness between the present and the past, if they feel ashamed about their kids' difficulties as well as investigating the reasons behind their denial of their kids' struggles.

3.5 The analysis of interview

The first question is aimed at knowing if dyslexia is hard to diagnose. The first interviewee replied "yes. Dyslexia is not something that is easy to diagnose due to a lack of specialists. The basic composition of guidance counselors is mainly in psychology, as is the case for me as a guidance counselor in middle school, or sociology in general. And we will basically talk about Psychology is particularly concerned with such disorders. But due to the preoccupations that fall on the shoulders of the advisors, as with administrative matters, it is difficult for them to diagnose all students due to overcrowding in schools and teachers' lack of sufficient knowledge about dyslexia" while the second therapist answered, "No, detecting them is relatively easy because there are many indicators that help to discover them, As for the parents, there are those who are aware of the matter and can grasp the professor's notes presented at the parents'

meetings about the general behavior of children, however, the specialist role to give a correct diagnosis comes later, because as previously, most cases are discovered by teachers or parents.” For the third one, he only replied with, “Yes, dyslexia is hard to diagnose”

In this question, we notice that interviewee A has a solid argument why dyslexia is hard to diagnose, therefore, he answered and justified his answer. Interviewee B was a bit subjective and did not put herself in regular people’s shoes (teachers and parents) in answering because, from a perspective of an expert, it is obvious that it is easy for her to diagnose dyslexia. As for interviewee C, he was enough with answering with a short reply.

As for the second question aimed at exploring how parents can detect dyslexia, the first interviewee responded “This is a complicated topic that demands more professional advice. But I can state that the symptoms are often inverting letters in the middle of phrases and sentences, difficulty separating letters, removing a letter, two or more letters from a word.etc. I can't go much deeper into this section because I'm not an expert in it.” The second psychologist said, “There are many factors through which this can be observed, the most important thing, is the degree of awareness of parents, which plays a fundamental role in discovering the state of such kind of disorders and of course, the sooner it is detected, the better” and the third one stated “Dyslexia cannot be diagnosed by parents however it can be noticed by means of some indicators like underachievement of grades since reading is included in all subject of study, low self-esteem that may lead to behavior disorders like aggression”

Even though he tried to give basic symptoms interviewee A preferred not to go deeper since he is not an expert and has not encountered much of dyslexic children since he works as a guidance counselor at a middle school more than he is a professional psychologist. Interviewee B claimed that indicators of detection exist, yet he did not give further explanation. However, Interviewee C offered several characteristics that parents may observe, such as attitudes, achievements, and behaviors, but it appears that he would prefer to have the child assessed by a professional rather than guessing based on what can be seen.

The third question was the same as the previous one however for teachers rather than parents, and since the first one said that he cannot go deeper, the first of the remained interviewees said “The child's behaviors reveal the truth about the s/his condition. S/he may not be paying attention throughout the session, or he may have a kind of delay in learning or understanding, etc.” the second interviewee, on the other hand, said “Teachers may detect learning disabled children in general and dyslexic one in particular by again, underachievement of grades, not bringing/ hiding their reading text-books, hiding them or they avoid situations in which the teacher notices their presence by hiding themselves in their friends back for example in order not to be required to read by the teacher, concerning reading, the teacher may notice confusion and unclear and low tone of voice or unclear words during reading, omitting words, Not following the lines or omitting them and switching letters. Etc”

Because teachers are more experienced and may have better information about the subject, both therapists B and C sought to give them some signs to identify children with learning difficulties.

The fourth question was about how both parents and teachers can help those kids, the first interviewee stated “ We should always begin with the understanding that the child may suffer from a problem, whether psychological or organic then after excluding the possibility of physical injury to organic we can move on to psychological factors. To do that, we have to follow a certain path by consulting the inner ears, larynx, pharynx, and thyroid at an otolaryngologist, orient the child to a speech specialist, and leave the psychology part as the last option just to make sure none of the mentioned factors are the reason behind his learning disability. However, if the teacher was the first to detect the child’s difficulties, here we return to the job of guidance counselors, even if he is not specialized in this type of disorder, he must direct the child to the school health department where he receives the diagnosis and possible treatment with school psychologists and school speech therapists” The second interviewee replied with “Let's start with parents. They must provide the necessary care by directing the child suffering from the disorder

to a specialist doctor. In addition to the fact that parents must be aware of the situation in order to deal with it in an appropriate way, from a psychological point of view, they must accept the situation in order for the child not to feel that something abnormal is happening. Because usually, some parents accept the situation and interact with it in a normal way but some do not as they feel ashamed of him or may even abandon him. However, concerning teachers, in normal cases, the teacher can discover that the child suffers from a special condition, but he cannot cure it. Instead, there are private schools and special methods which may help this kind of children to overcome their difficulties, yet, it is still hard to achieve especially with the number of parents that refuse to recognize or acknowledge the situation." The third interviewee stated "Concerning parents, they should consider both familial and educational accompaniment and providing a suitable environment for reading because when parents do have a poor language in terms of processing it, we cannot expect the child to have a good articulation due to inheriting it from them, besides providing reward and encouragement to empower the youngster mentally during reading and any positive attitude from his part in order for the child to have a regular perception about his own self. Regarding teaching, they can make conditioned programs in subjects that require reading that matches the abilities of this type of children, these programs should contain different techniques that serve every child individually according to her/his difficulties" when he was asked for giving an illustration, he explained, "There are trained teachers who apply the competency approach which is based on teaching children according to their competences and disabilities like Autism and Down syndrome in special education centers who know that children have different capacities, skills and personalities and each one of them requires a specific method. Therefore, since learning disordered children require special education, they should be taken to such centers and receive the appropriate treatment, after that, they can be reintegrated again into regular schools. Yet, some of them receive this treatment without the need to be transmitted to special education centers, instead, teachers who are specialized in special education can belong to normal schools and apply the needed techniques to children with learning disorders or dyslexia in

particular”

Since interviewee A is a guidance counselor, although he mentioned some points about parents, it is noticeable that he focused on the issue from this angle as he provided what guidance counselors can do to overcome the problem. Interviewee B, on the other hand, focused more on parents’ awareness because, for her, they are the key to an appropriate orientation. Interviewee C offered a very detailed procedure on the most suitable procedure to help those children, even though it is almost impossible to be done in Algeria.

The fifth question was mainly about how can parents and teachers find the appropriate accessible knowledge about this topic, the first interviewee answered “They should seek the advice of professionals and experts in the field, as well as school health personnel or trained orthopedic specialists. And we typically obtain the proper information with experienced individuals who have been in the sector for a long time, i.e. with experience.” The second specialist argued that with the advancement of technology and the variety of references available on the Internet, they simply need to search on a regular basis to gather the essential knowledge. For parents with minimal expertise, it is necessary for them to see a therapist in order to acquire a list of guidelines that will allow them to handle the situation perfectly. The third interviewee stated “In order to find the appropriate knowledge, parents should approach specialists in the field of psychology particularly educational and school psychologists whom we can find in School Health departments as well as speech therapists who are also familiar with the topic”

Mostly, all interviewees A, B, and C agree on either going to the most accessible specialist or searching online.

The sixth and seventh questions targeted the impact of unawareness and neglecting the child’s disability at the mental, academic, and social levels. The first expert said, “Psychologically, whether, in the primary stage or adolescence stage, the youngster suffers from social isolation and psychological alienation when neglected, as he/she might suffer from social isolation and psychological alienation state of depression. It also affects his social contact.” He adds after being

asked if this case can be developed into social phobia, “A bit, but the lack of social contact is less difficult. If the kid suffers from dyslexia, reading or writing, or a delay in speaking, he will suffer from bullying even from his teachers often so they put pressure on him causing him shame, and other psychological problems. From a social point of view, the student may not form relationships and friendships in the school environment. As for academically, I will suffice by mentioning the repetition and school failure, not to mention dropping out.” The second therapist in the other hand stated, “If the condition is not taken care of and neglected, it will develop and exacerbate seriously, especially from the psychological aspect. As for the academic aspect, it can reach the point of abandoning studies, and the consequences extend to the youth period, where he can become aggressive towards people and it may happen that he becomes isolated, living inside the shell of his thoughts” then she adds, “It can also affect society negatively, especially when making a family. The third specialist said, “In addition to dropping out and having low grades or school failure, the child may also suffer from intense anxiety, low self-esteem feeling ashamed, getting bullied, being a bully, or using other mechanisms like pretending to be sick in order not to go to school. Concerning the social level, the child may face a lack of adaptation with s/his colleagues or society itself because most life situations include reading, on medicine boxes, bakeries, hospitals, schools, and supermarkets. Etc, therefore, it leads that child to social isolation, as well as the society may exclude him and view him as someone who has some skills (manual skills) but is intellectually limited due to the fact that we grasp ideas through reading”

In terms of academic impacts, all interviewees agree on the underachievement of grades, dropping out, and school failure. Further, they also agree that children may develop a kind of emotional frustration that may include other mental disorders and finally exclusion from society.

The eighth question was about parents’ awareness of learning disorders in the current time in comparison to the past. The first specialist replied “Sort of... yes, with the repercussions of globalization and technology, parents resort to Internet engines to search for such disorders, and even put their questions to experts in the field online, and this has led, even if a small percentage,

to the normalization of the culture of seeking psychological assistance in the family context. This does not mean that there are some problems that the parents still deny as the problem of dyslexia in particular. The father feels that his son is neither intelligent nor diligent, and does not deserve the effort, and therefore compares him with others and abuses him verbally or physically. The disorder can even be neurodevelopmental... and I want to open the field also to mention other problems, such as scolding the pupil "for his own good"...etc. There is a change, but not enough.” The second specialist stated, “Yes, compared to the past, the development is noticeable and tangible, due to the development taking place and the ease of obtaining information. In addition, most of the parents currently have an acceptable level of education that allows them to discover the condition earlier.” The third interviewee said, “Yes, parents now tend to register their children to receive support lessons and some of them consult them to therapists. However, the problem lies in how we deal with such conditions in the real-life context because we notice so many problems in the educational system itself such as the lack of the suitable equipment and overcrowded classes since the class that includes 40 pupils is not the same as the class that includes 15 pupils, in this case, it is almost impossible for the teacher to take care all of his pupils not only the ones who have learning disorders”

when he was asked what should we do in this case, he argued that various awareness campaigns should be carried out and focus on the basic training of psychologists in the field, in particular, i.e., quality training. The number of guidance counselors and the quality of their training are sometimes not enough to take over the tasks, and they must accompany a team of psychologists to work among them.

Regardless of the information, each respondent supplied, they all agreed that there is a difference between the past and present in terms of parental awareness, which is a significant contribution to the Algerian future generations.

The ninth and last questions focused on knowing if parents deny and feel ashamed about their kids who have learning disorders. The first specialist stated, “This occurs as a result of ego- related

issues, i.e. narcissism. Therefore, Parents deny the disability of their children subconsciously since a part of their mind leads them to believe that they contribute to the harm their kids suffering from. It is a subconscious rejection of parents through which they start to blame the specialists and teachers and accuse them of their inability, find various excuses, and pretend that there are no problems in the first place. This is due to the stigma that society places on such disorders. There is a large percentage of neglect and lack of Acknowledgment of psychological and scholastic hardship.” He further adds, “Parents find it difficult to understand that Individual variances in performance are common and are perfectly natural. There are people who receive excellent grades and those who receive ordinary grades, which must be respected because the degrees and types of intelligence vary from person to person. There are people with academic intelligence and those with social or emotional intelligence the parents are unaware of these differences, so they think of being reserved and ashamed of their children when they are not distinguished at school. Parents do not accept these basic aspects, let alone accept psychological disorders, difficulties in speaking, autism spectrum, and so on. There is a social culture that insists on canceling the child if he does not achieve a set of required tasks. They often attribute the failure of children to the failure of parents and the family as a whole.” The second specialist said, “Denial has a meaning, and here lies the role of the psychologist who deals with that parent by convincing him/her that the condition of the child can be handled” The third one agreed with the first one by saying “parents deny their children’s disability due to their narcissism as they tend to blame the other either teachers, the educational system, the ministry of education or the difficulty of the curriculum while learning disorders (dyslexia) is widespread across the world not only in Algeria or Guelma” after being asked about shame, the interviewee argued that if parents are aware of children’s variation, they would definitely understand that their kid has other skills that can be worked on, so there is no need of the shame, if not yes, they can be because their kid does not fulfill their expectations. He also expressed that it is hard to answer the question since we do not have exact statistics about the issue.

In spite of not mentioning it explicitly, Interviewee B had the same point as the two other respondents. Which is the idea that due to their narcissism parents find it challenging to accept their children's injuries. However, from a personal point of view, parents may be more concerned about their kids rather than ashamed owing to their innate instinct to protect their children.

After having a further conversation with those specialists, the researcher had the chance to spontaneously ask more about their opinions about learning disorders.

Regarding if dyslexia is genetic, one of the interviewees argued that even if there are multiple studies claim that dyslexia is genetic, he personally believes that it is not an organic inheritance because he did not encounter an experiment that proves the first position, like splitting real twins in different environments and observing if they do both are dyslexic. Instead, it may be a cultural inheritance, that is to say, if the child has been raised in a family where dyslexia exists, he/she can acquire it unintentionally through time. Apart from dyslexia, he gave another example claiming that if the father hates mathematics for example, and since the child is naturally attached to his/her father (based on the attachment theory), he/she may hate mathematics too.

Concerning the diagnosis, the first therapist argued that the learner must identify organically in parallel with speech therapy for full knowledge of his condition. As for the guidance counselors, they do not have that ability, whether in terms of the scarcity of time and the aggravation of tasks, or the severe overcrowding of schools which makes it an almost impossible task. Yet, the least they can do is redirect the kids to specialists who are skilled in these cases, such as school health workers. What happened recently is the circulation of guidance counselors in all educational institutions and in various regions, pending employment psychological castration as well, and why not. There are also formations that it is advisable to accelerate because the future of the pupils is at stake.

On the other hand, the second therapist gave a detailed answer, he claimed that in order to make a correct diagnosis, psychologists must follow some steps called "Exclusion criteria" in order not to fall into the misconception that any child who is not able to read is labeled as dyslexic. Primarily, children who suffer from deafness or dumbness are not considered dyslexics because they have an organic problem. Secondly, children who did never reach school cannot be labeled as dyslexic as well

due to the fact that they never learned how to read in the first place. And finally, children who are less than eight years old. When he was asked about the before-school stage dyslexia, he argued that those are just indicators that do not necessarily resemble reality. Therefore, to be dyslexic, the kid must be beyond the age of eight, enrolled in school, have no physiological difficulties, and have no mental deficiency (retardation)

3.6 Summary of the results

3.6.1 Summary of The results from teacher's questionnaire

Besides the fact that most of the population chosen to answer the questionnaire are University graduates, most of them have more than five years of experience meaning that they should be more empathetic with their pupils. According to the questionnaire, all teachers understand what learning disorders are as they classified dyslexia to be the most common one, and have had experience with such children, despite the fact that it is difficult to determine whether they can distinguish between a child who has a true condition and a child who simply lacks practice, assistance, and assessment. Based on the conducted data, teachers understand that children vary in capacities and not all of them learn the same way. However, the problem lies in the huge need for psychological assistance in schools owing to the lack of work positions despite the availability of human resources, as thousands of people graduate from the psychology department every year. One of the misconceptions the participants of this research's questionnaire fell into, is putting the blame on parents by believing that they abandon their children or take less care of them. Consequently, they generated an exception and intended to exclude themselves from being a part of the problem

3.6.2 Summary of the results from psychologist's interview

Since the interviewed specialists work in a similar field besides being University teachers, they agreed on some points like giving the same indicators on how to detect learning disorders, and symptoms, what our educational system lack, and what methods should be used to provide help to learning disordered kids, parents awareness between the past and the current time. etc. and disagreed on other points such as if dyslexia is easy to be detected and if it is genetic.

Concerning the interview's answers, they were perfectly sufficient since they fulfilled the researcher's expectations and the objectives of the research.

3.7 Pedagogical implications

With parental and school help, dyslexic children can eventually overcome their difficulties, In order to stimulate and assist their learning process, a number of alternatives should be considered as follows:

Reading out loud

Reading to youngsters can help them develop their language and understanding. Children with dyslexia may struggle to think in words or read them directly from the page. Therefore, reading for them or providing them with audiobooks can be very helpful.

Decodable books

Decoding will be easier if the reading material has a lot of familiar single and closed-syllable words.

Giving them a break

Some homework may be tiring for dyslexic children; giving them some time to replenish their batteries can be very beneficial in order for them to make better efforts.

Encouragement

Every success should be celebrated. Confront children at their reading and celebrating their accomplishments is very encouraging.

Setting realistic goals

Establishing an attainable objective for the kid will improve their reading

(How to Help Struggling Readers with Dyslexia - World Literacy Foundation, 2021)

3.8 Limitations of the study

Due to the short period of time, some factors resulted in imperfect research. One of those factors is not having an encounter with parents of dyslexic children and viewing the situation from their perspective. A classroom observation might also be helpful in comparing teachers' answers and their real-life treatment. Another limitation is the researcher's desire to make an interview with one of the most known educational psychologists in Guelma and not being able to, owing to her occupation and responsibilities.

Administrative concerns are one of the most typical obstacles that practically every student faces. As a result, accessing the administrator like the school director. The issue is not that they are busy; it is that they keep people waiting without caring whether they have responsibilities to do when they can easily organize appointments instead.

Even though the researcher was probably unable to manage her time, the time committed to performing this research after other obligations such as teacher training, taking and having papers, and attempting to have a strong empirical study was insufficient.

3.9 Suggestions for future research

Working on educational psychology, particularly on learning difficulties, must be more practical than theoretical and descriptive in the future. Parents of disabled children should be included in the research, which means that experimental approaches such as attempting strategies indicated by major scholars and observing the results should be used. To address the issue of the absence of psychologists in schools, independent research must be conducted in that regard, translated into Arabic, and sent to the authorities, looking for a change since that's what we truly need right now real-life change.

Conclusion

This chapter was divided into two parts, it focused on exploring Mouloud Feraoun primary school teachers' awareness and attitudes toward their pupils with learning disorders and analyzed an interview with three experts in the field of psychology. Both the questionnaire and the interview were conducted in Arabic and translated into English. Regarding the results and the real-life situation, a variety of limitations need to be addressed. Teachers should be educated enough, guided by educational psychologists, given the means through which they can be helpful like technological audio-visual aids and the number of pupils in each classroom should be reduced.

General conclusion

In this dissertation, we identify Learning disorders and investigated primary school educators toward Learning disabilities and dyslexia in particular, by means of two data collection tools are a questionnaire addressed to elementary school teachers of Mouloud Feraoun, Guelma and an interview with the most accessible experts in the field of psychology of Guelma.

The acquired figures indicated that the majority of teachers are familiar with learning disorders despite the low number in each classroom. It also showed that among a variety of types of LDs, Dyslexia was classified the first in terms of commonality. The majority of teachers agreed on the fact that children with reading and writing problems become upset when they are required to read or go to the stage in order to write on the board. Not only do all of them share the opinion that reading, writing and mathematics are the most skills pupils struggle with, but they also argued that such disorders have a huge impact on the academic achievement of children.

In regards of teachers' experience with educational psychology, we notice that they barely know that school psychologists exist owing to the fact that the majority of them do not have any personal contact with the guidance counselor of the school they work in. however, fortunately, most of them believe that the presence of educational psychology is very crucial to enhance dyslexics and children's performance in general. One of the good sides of this research is that teachers answered positively regarding orienting parents to seek a professional diagnosis for children whom they observed have learning problems. Yet, the negative side is the fact that the majority of them think that parents are responsible for their children's academic failure.

Based on this research one of the most dangerous problems we encountered is the fact that there is a huge lack of equipment and the lack of providing workplaces in schools for the ones who have a considerable background in psychology. In this case, psychology graduates have no job in one hand, and children who need consistent assistance cannot receive it in the other hand.

In order to see the issues from a unique viewpoint, an interview with psychologists was undertaken in this study. They argued, however, that dyslexia is a difficult disease to detect based on the facts.

Nonetheless, the three of them endeavored to provide common dyslexia symptoms. Concerning the negative consequences of being unaware, all of the experts emphasized school failure, dropping out, and having social, emotional, and behavioral issues. An encouraging aspect is that, despite the problems they confront in Algerian culture, parents are more concerned about their children's psychological well-being.

In addition to providing the correct way of giving a diagnosis, they all pointed out that parents may be overprotective and narcissists meaning that they attempt to fit their children in a mold they do not fit in and expect them to always be the best, ignoring that kids differ and they have different abilities. To conclude, both teachers and therapists expressed their concern on how the Algerian government is handling with the situation, especially regarding the over crowdedness of pupils in the classroom.

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The practical part of the study

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Appendices

Appendix 1: Teachers' Questionnaire

Appendix 2: Psychologists' questions of the interview

Appendix 1: Teachers' Questionnaire

استبيان بحث تخرج

الكشف عن صعوبات التعلم لدى تلاميذ المدارس الابتدائية

مقدمة

في إطار انجاز بحث تخرج قصد الحصول على شهادة الماستر في تخصص لغة انجليزية و ثقافة نقدم لكم هذا الاستبيان الموجه خصيصا لمعلمي تلاميذ المدارس الابتدائية الذي يهدف إلى دراسة صعوبات التعلم عند هذه الفئة من المتدربين والذي بدوره يركز على عسر القراءة كواحدة من هذه الصعوبات، لهذا نرجو منكم التكرم بالإجابة حول الأسئلة المقدمة بكل عناية من أجل مساعدتنا على فهم هذه الظاهرة و تسليط الضوء عليها كما تقدم الباحثة كل الضمانات بخصوص التحفظ على الإجابات دون إشارة لأسماء الأشخاص المشاركين في البحث.

الباحثة | بورهدون هادية. سنة ثانية ماستر
لغة إنجليزية و ثقافة. جامعة 8ماي1945قائمة

1) من فضلك، اشر الى المستوى التعليمي الخاص بك

- ثانوي
- جامعي
- مُعَهَد
- مدرسة عليا

2) كم عدد سنوات الخبرة التي لديك في مجال التعليم الابتدائي؟

.....

3) هل سبق و تعاملت مع أطفال يمتلكون صعوبات في التعلم؟

- نعم
- لا

4) في حالة الإجابة بنعم، ماهي نسبتهم بالتقريب في كل قسم؟

- 5% - 10%
- 10% - 30%
- 30% - 50%

5) هل سبق و تعاملت مع أطفال يعانون من الصعوبات التالية؟ أشر إليهم.

- عسر القراءة
- عسر الكتابة
- عسر الكلام
- عسر الحساب
- صعوبات التهجئة
- صعوبة التركيز
- فرط الحركة

- اضطراب المعالجة السمعية.
- اضطراب معالجة اللغة.
- صعوبات التعلم غير اللفظية.
- اضطراب المعالجة البصرية.

6) هل تعتقد أن هؤلاء الأطفال يزعجون عندما تطلب منهم القراءة بصوت عالي أو الكتابة في السبورة؟
 نعم
 لا

7) في حالة الإجابة بنعم، كيف يعبرون عن انزعاجهم؟

.....

.....

8) هل تعتقد شخصياً أن بعض التلاميذ يتعلمون بشكل أبطأ مقارنة بالآخرين؟
 نعم
 لا

9) إذا كانت الإجابة بنعم، ماهي النشاطات التي يؤديها بشكل أبطأ مقارنة بآثرابهم؟
 10) هل تعتقد أن عسر القراءة يؤثر على نتائج التلميذ المدرسية؟
 نعم
 لا

11) في حالة الإجابة بنعم، هل يكون التأثير من خلال: (يمكنك اختيار أكثر من إجابة واحدة)
 الحصول على علامات متدنية في الامتحانات.

عدم إكمال الإجابة على أسئلة الامتحانات قبل انتهاء الوقت.

عدم فهم الأسئلة المطروحة بسرعة وفعالية.

البطء في نقل الإجابات على ورقة الامتحان

12) هل سبق لك أن حضرت ندوات دراسية تهتم بنشر الوعي حول اضطرابات التعلم؟
 نعم
 لا

13) إذا كانت الإجابة بنعم، رجاءاً لخص لنا أهم ما تناولته تلك الندوات.

.....

.....

.....

14) من خلال خبرتك المهنية، هل دائماً ما تمتلك المدارس التي عملت بها (بما في ذلك هذه المدرسة) مختصاً نفسياً أو مستشاراً توجيهياً مخصص لمساعدة التلاميذ؟

نعم

لا

ربما

15) في حالة الإجابة بنعم، هل أنت و تلاميذك على اتصال شخصي مع الاخصائي النفسي الخاص بالمدرسة؟

نعم

لا

16) هل تعتقد أن وجود أخصائي نفسي في كل مدرسة ضرورة ملحة؟

نعم

لا

17) من فضلك، تكرم بتبرير إجابتك في كلتا الحالتين.

.....

18) هل تتواصل عادة مع أولياء التلاميذ لإبلاغهم بالحالة النفسية لأطفالهم و سلوكياتهم في الفصل؟

نعم

لا

أحيانا

19) هل سبق لك أن وجهت أولياء التلاميذ لفحص أبنائهم عند أخصائي نفسي؟

نعم

لا

20) في حالة الإجابة بنعم، هل كان ذلك الإجراء مثمرا؟

نعم

لا

21) حسب خبرتك، من برأيك المسؤول الرئيسي إذا كان التلميذ غير قادر على القراءة، الكتابة أو التركيز داخل القسم؟ (يمكنك اختيار أكثر

من إجابة واحدة)

إهمال الوالدين

كسل التلميذ

البرنامج التربوي المكثف

صعوبة المعلومات التي يتلقاها التلميذ مقارنة بمستواه الذهني

أسباب أخرى، تفضل بذكرها

.....

22) كيف تتعامل شخصيا مع الاطفال الذين يعانون من عسر القراءة داخل القسم؟

.....

23) إذا كانت لديك أية ملاحظات إضافية، تفضل بادراجها، مع خالص الشكر

.....

Appendix 2: Psychologists' questions during the interview

هل يصعب اكتشاف عسر القراءة؟

كيف يمكن للوالدين معرفة أن ابنهما يعاني من عسر القراءة؟

ماذا عن المعلمين؟

ماذا يمكن لهم أن يفعلوا لمساعدة الطفل؟

إلى جانب تشخيص الطفل ، أين يمكنهم العثور على المعلومات المناسبة حول هذا الأمر؟

ما هي عواقب عدم الوعي بها؟

كيف يمكن أن يؤثر تجاهل صعوبة الطفل في التعلم عليه نفسياً، أكاديمياً واجتماعياً؟

هل تلاحظ ان الاولياء حالياً اكثر وعياً و اهتماماً بالصعوبات التي يعاني منها اطفالهم من قبل؟

هل عادة ما ينكر الاولياء صعوبات ابناءهم بعد تشخيصك لهم؟ هل يشعرون بالخجل من الاعتراف بمعاونة اطفالهم؟

ملخص

اضطرابات التعلم هي قضايا منتشرة في العالم و قد تؤثر على الأفراد عامة، وخاصة المتعلمين الصغار. كان الدافع وراء اختيار هذا الموضوع هو قلة وعي البالغين بشواغل الأطفال نفسية كانت او لغوية نفسية او تعليمية، لا سيما بين اساتذة المدارس الابتدائية وأولياء التلاميذ. تهدف هذه الدراسة إلى تحديد اضطرابات التعلم، وتقديم لمحة عامة عن تاريخ هذا الميدان بالإضافة إلى تغطية أنواع اضطرابات التعلم، وتسهيل الضوء على الجوانب الرئيسية لعسر القراءة. كما تخوض الدراسة في البحث في حالة تدرس أطفال مدينة قالمة في الابتدائيات وما إذا تم اكتشاف اضطرابات التعلم الخاصة بهم أم لا. ولتحقيق أهداف الدراسة، يعد هذا البحث مزيجاً من الوصف النوعي والكمي الذي تم جمع البيانات فيه من خلال استبيان تم إرساله إلى عينة من اساتذة المدارس الابتدائية بمدينة قالمة لاختبار المامهم ووعيهم بالموضوع. بصرف النظر عن مقابلة مع الخبراء الذين قاموا بتزويدنا بمعلومات أكثر تفصيلاً حوله. في الأخير، اعتزنا تسليط الضوء على موضوع تم تجاهله كثيراً في المجتمع الجزائري، ليس فقط من أجل التوعية بل لتحقيق بيئة تعليمية معززة للأطفال كونهم استثماراً وطنياً ومن ثم عالمياً.

Résumé

Les troubles d'apprentissage sont des problèmes universels qui peuvent affecter les individus, notamment les jeunes apprenants. Le choix de ce thème a été motivé par le manque de sensibilisation des adultes aux préoccupations psychologiques, psycholinguistiques et éducatives des enfants, en particulier chez les enseignants du cycle primaire et les parents des élèves. Cet article vise à identifier les troubles d'apprentissage, donne un aperçu de l'histoire du domaine encouvrant les types de troubles d'apprentissage, met en évidence les principaux aspects de la dyslexie, et enfin étudie la situation des enfants des écoles primaires de Guelma et si leurs troubles d'apprentissage sont détectés ou non. En outre. Pour atteindre les objectifs de l'étude, cette recherche est une fusion de quête descriptive, qualitative et quantitative dans laquelle les données sont recueillies à travers un questionnaire transmis à l'un des enseignants de l'école primaire de Guelma pour examiner leur prise de conscience en plus d'un entretien avec des experts qui nous ont fourni avec des informations plus détaillées sur le sujet. En conclusion, on a entendu mettre en lumière un sujet très ignoré dans la société algérienne, en luttant nonseulement pour la sensibilisation mais pour un environnement d'apprentissage meilleur pour les enfants en tant qu'investissement national puis mondial..