

# Technological Implication and Pedagogical Effects of Reading Difficulties on the Linguistic Achievements of the Moroccan Child for Some Primary Schools



Siham Zain, Jabran Daaif, Soufiane Zerraf, Said Belaouad, Abderrahim khyati

**Abstract:** According to Western countries, dyslexia suffer from a high proportion of 3% to 6% of school-aged children, and the prevalence rate is higher among boys than girls, which is an indication of an increase among men with dyslexia. The percentage of people with dyslexia varies from one language to another, the percentage being higher in China because of the difficulties of the Chinese language and the reliance on images and symbolic forms. Through a methodology based on new technologies in a pedagogical framework, and we were able to study various statistics, and it seems it is weaker in Japan where language is easier and more compared to dyslexia between England and Germany. Among children of the same age, gender, and level of education (grade 2), the percentage in England ranged from 40% to 60%, compared to 17% in Germany, and decreased progressively with the school scale, reaching 8% because of the ease of German compared to English.

For Arab societies, there are currently no statistics available in Arab countries show the number of people with dyslexia among children or adults.

**Keywords:** Arabic societies, Dyslexia, Language, Morocco, Reading

## I. INTRODUCTION

During your schooling, your child may face learning difficulties. He can no longer assimilate the knowledge that is transmitted to him and finds him in school failure.

There are temporary difficulties related to what the child lives on a daily basis and learning disabilities considered as a real permanent handicap.

According to the WHO (World Health Organization), learning disabilities [1] are permanent neurological disorders that affect one or more neuropsychological functions and disrupt the acquisition, understanding, use and treatment verbal or non-verbal information.

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Attention disorders can affect many specific functions such as language, memory, landmarks in time or space, calculation, coordination, motor skills, communication, and so on. Only a diagnosis made during an in-depth evaluation will make it possible to detect what type of disorder it is and to set up appropriate monitoring and support.

## II. METHODOLOGY

In our study, we have based on two theoretical and applied aspects, the practical aspect of this study being:

- We collected information on dyslexia so that we could build a questionnaire containing 15 questions.
- The questionnaire is in amendment in the project before being written in its final form.
- The questionnaire writes and prints and has a look before distributing it to primary school teachers and speech therapists.
- We distributed the questionnaires to 6 primary schools.
- We gave teachers the freedom to answer the questions in the questionnaire and returned to the collection after one week prompted to obtain 120 samples. It was a moderate percentage compared to the number we expected.

## III. LEARNING DIFFICULTIES

Learning difficulties are often detected at school when the student does not reach the level required for his or her age group. They may take the form of a drop in motivation, memorization or limited concentration, an inability to solve problems, unsuitable social behavior, etc. Complex socio-affective conditions, bereavement, anxiety, economic worries can lead to school drop-out. By detecting the source of the problem and accompanying it to eliminate the elements involved, it is then possible for the pupil to return to a normal learning rhythm.

### A. Academic Learning Disabilities

It refers to the difficulties of academic performance, namely reading, writing, spelling, writing and arithmetic. These difficulties are largely related to the difficulties of learning through development [2-3], for example:

- Learning to read requires the ability and ability to understand and use language, and the ability for auditory recognition to recognize the sounds of word letters (awareness or perception), the visual ability to distinguish and identify letters and words.



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- Learning to write requires the effectiveness of many motor skills such as: motor perception, precise kinetic synergy for the use of fingers and the synergy of hand and eye movements and other skills.
- Learning to calculate requires visual spatial perception skills, quantitative concepts and knowledge of the number and values of value and other skills.

This means that the child's level of academic success is not compatible with the level of his or her mental abilities and that this type of learning difficulty includes the following elements:

### 1. Difficulties learning writing:

This type of learning difficulty manifests itself in many forms, the most important of which is the child's inability to know the shape and size of the letter, as well as the inability to control the distance between the letters or the letter. Writing commonly used words, as well as spelling and grammar errors resulting from his inability to distinguish similar sounds, errors in writing, deleting, adding or replacing certain characters in the spelling [4].

### 2. Difficulties learning to read

They appear in many forms, such as the difficulty of linking character and character, the formation of words of several letters, as well as the distinction between letters that can vary in form, such as simple and plural, in addition to the difficulty in quickly identifying or analyzing words for pronunciation Know and memorize the diacritics, delete some characters, add others, replace some characters or distort their pronunciation [5].

## B. Developmental learning disabilities

These are difficulties related to brain function, mental and cognitive processes that the child needs to succeed in his studies, and that can be caused by functional disorders of the central nervous system, namely:

These difficulties [6], which concern pre-university processes, which are cognitive processes related to attention, perception, memory, thought and language, on which academic success depends, constitute the most important basis on which mental activity of the cognitive individual. These difficulties can be divided into two subtypes, namely:

- Initial difficulties: such as attention, perception and memory.
- Secondary difficulties: such as thinking, speaking, understanding and speaking.

Learning difficulties related to development affect three key areas:

- Language development.
- Cognitive growth.
- Growth of visual motor skills

A good part of these disorders are grouped under the popularized term of disorders DYS:

- Dyslexia: a learning disability in spelling and reading;
- Dysgraphia: organization and difficult coordination of writing making it too slow and often incomprehensible;
- Dyscalculia: a written language disorder dealing more specifically with numbers and calculation;
- Dysphasia (called "developmental language disorder" since 2017): structural and lasting disorder of learning and development of oral language;
- Dysorthography: a persistent learning disability in the

acquisition and mastery of spelling leading to a dysfunctional writing;

- Dyspraxia: movement disorder resulting in total or partial incapacity to automate and plan actions.

What to do if your child has difficulties or a learning disability?

If your child is failing school, it is important to consult a specialist to identify the source of his or her difficulties. The school community can refer you to a speech therapist, an occupational therapist, a psychologist, etc. They will evaluate the type of support for your child and find the accommodations that will maximize their learning, performance and well-being.

These health professionals will help you better understand your child and the nature of their difficulties in order to create a suitable environment whether at school, at home or in any day to day situation. Learning disabilities are extremely common and are not necessarily related to a motor disorder or intellectual disability.

Do not think alone to live these difficulties! Do not hesitate to talk or consult because when they are diagnosed, the resulting support can only improve the quality of life of your child and thereby that of the whole family.

## IV. RESULTS AND DISCUSSION

The practical aspect is complementary to the theoretical aspect, since each problem begins with hypotheses and a set of theoretical studies adopted and consequently when the researcher collects the various information on the subject that he wishes to study and presents in the form of titles and points, then begins to apply these assumptions.

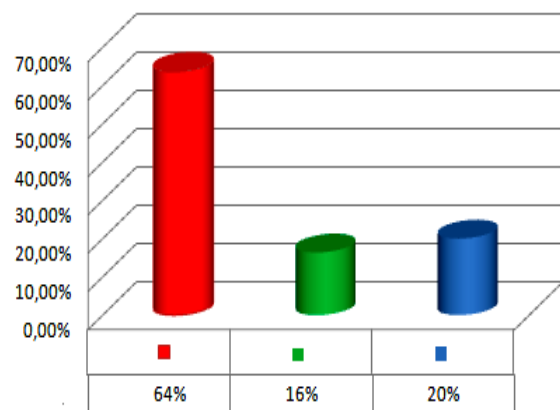
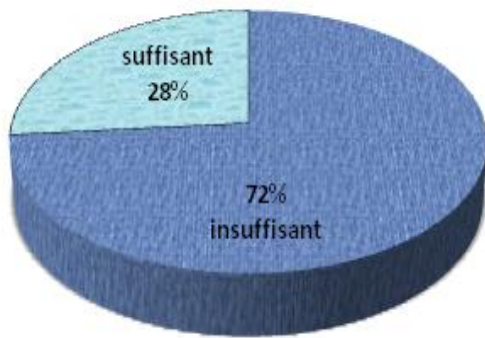


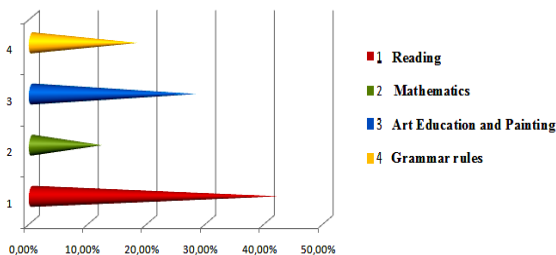
Fig. 1. Survey of Learning Disabilities

In our study, we have adopted two theoretical and practical aspects; the practical aspect of this study is a questionnaire. The survey shows that a large and growing percentage of students with reading difficulties 64%, 16% have difficulties in mathematics and 20% have difficulties with writing and spelling, which are very high and require immediate intervention of teachers.



**Fig. 2. Teachers' opinion on the number of Arabic lessons scheduled each week**

The figure 2 shows that 72% of teachers believe that the number of Arabic lessons is sufficient to overcome the difficulties encountered by students in learning, while only 28% for them feel that the number of courses in programmed Arabic is insufficient to overcome the difficulties of the student, which is very small compared to the first. Finally, we will conclude that most teachers are able to control the time elapsed between teaching and using methods to help students overcome their learning difficulties, but few others have any chance of give classes and help students overcome their



learning difficulties.

**Fig. 3. Students' preferences according to subject**

What we see in figure 3 is that students' attitudes vary from reading to appearance, through expressions and sentences that are rich in images and graphics, and that these trends clearly show awakening activities such as drawing, physical education and writing.

However, the lack of student contributions to mathematics, because it creates an effort and a sense of tiredness and disappointment for not getting the right results, as with grammatical rules, it is noted that the student, although inclined to read and write, nevertheless, struggles for adaptation with linguistic phenomena.

## V. CONCLUSION

The subject of our study is part of an educational context, it's focused on the impact of dyslexia on the achievement of language in the Moroccan child, which means that whenever the level of reading is weak and low whenever the reading becomes weak, and vice versa, the emergence of dyslexia in some students inevitably leads to low and low level of study and achievement by answering the Questions asked. According to the algorithm presented in this work, the high percentage of victims of dyslexia and their permanent inability to dismantle the visible symbols are evident in their lack of conditions of good reading. We conclude from this

research that children are reluctant to read because they cannot read well because of their dyslexia disability.

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