

“Teacher’s knowledge about some of dyspraxia elements in the Republic of Kosovo”

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Introduction

It's the little things in life that people take for granted, when most people get ready to leave for the day, everything will be done automatically. When you are a person with dyspraxia you have to think and focus on every little detail and every movement our bodies make. Lack of coordination mean that only sometimes we walk without problems, or our movements can be quite clumsy. Things we may find difficult are: opening jars and using can openers, washing hair, pouring drinks or cooking food without spilling and walking in a straight line (Edmondson, 2015).

A learning disorder is recognized by health professionals as a neurobiological disorder of cognition and/or language processing caused by atypical brain functioning. They manifest with severe difficulties in listening, speaking, reading and writing, reasoning or mathematical skills. (Crenitte, Oct 16, 2012).

According to Lopes and Crenitte (2012) school is children's main access to written language and therefore it becomes essential that teachers and coordinators recognize learning disorders and adopt their teaching methods so that they can collaborate with all children and not only those who do not present any learning disorder.

The process of learning to read and write includes the use of phonological and orthographic strategies, bearing in mind that some children may present serious difficulties with phonological aspects, while others may present such limitations in relation to orthographic aspects (Zorzi JL-, 2008). According to Salles JF (2007), the classroom is a natural context for assessing children's written language, in addition to allowing continuous and longitudinal analysis of their progress; therefore, the role of the specialist, in collaboration with the teacher, provides great importance for teaching practice. Carvalho (2007) asserts that the determination of teachers, in relation to students who fail, can be related to external factors other than the teaching system. Dyspraxia is a developmental disability in the organization of movements caused by an immaturity of the brain that results in incorrect messages being transmitted to the body. It is a subtype of coordination disorder and a specific disorder in which an individual presents deficits in conceptualizing, planning and executing movements (Wilson, 2009). According to the European Academy of Childhood Disability (2012), it has been determined that around 5-6% of school-age children are affected by dyspraxia and according to Dyspraxia Kids Australia, (2015) one in 20 children are affected by dyspraxia. The most affected gender is male, 7 to 2 in relation to the female gender (European

Academy of Childhood Disability, 2012). Boys are affected more often than girls, but many people with symptoms are never diagnosed, prompting some experts to dub it a “hidden problem.” (Gibbs, John, Jeanette Appleton, & Richard Appleton, 2007). Specific language impairment is diagnosed in children who fail to develop language normally for no apparent reason, while the diagnosis DCD or dyspraxia applies to a child who experiences movement problems in the absence of other difficulties (Hill, 1998).

Types of dyspraxia

Types of dyspraxia are: ideomotor, conceptual, oromotor, construct.

Ideomotor dyspraxia means difficulty in performing single-step actions such as combing hair or waving a hand in greeting. *Conceptual dyspraxia* means difficulty in performing a series of movements such as: brushing teeth or making the bed. *Oromotor dyspraxia*, also known as verbal or word apraxia, is a difficulty in coordinating the muscles of the speech apparatus, which makes it difficult to pronounce words. *Construct dyspraxia* means difficulty in spatial organization, difficulty in copying drawings and difficulty in building blocks (Scalais, Emmanuel, Christian Nuttin, & Audrey Galluzzo, 2009).

Causes of dyspraxia

Although the exact causes of dyspraxia are still unknown, it is thought to be caused by a disruption in the way messages from the brain are transmitted to the body. This affects a person's ability to perform movements in a smooth and coordinated manner. Another that can be considered as cause of dyspraxia may be heredity and early birth (Laurence Vaivre-Douret, 2012).

Symptoms of dyspraxia

Currently, there is no validated list of diagnostic features that distinguish dyspraxia from other childhood speech disorders, including those due to phonological delay or neuromuscular disorders (dysarthria).

However, three segmental and suprasegmentally features consistent with a deficit in planning and programming movements for speech have gained some consensus among those investigating dyspraxia:

- Inconsistent consonant and vowel errors in repeated productions of syllables or words,
- Prolongation and interruption of the co-national transition between sounds and syllables,
- Inappropriate proceed, especially in the realization of lexical or phrasal stress (ASHA, 2007).

According to the Dyspraxia Foundation (2017), general symptoms differ by age stage, and some of them are:

Pre-primary age (3-5 years old): can repeatedly crash into objects and fall on them, difficulty in accessing a bicycle or tricycle, as well as a lack of fear of dangers such as jumping from heights, etc., disordered eating, prefers to eat with fingers and in most cases spills drinks, weak fine motor skills, difficulty holding a pencil or using scissors, laterality unspecified (left-right), persistent language difficulty, limited concentration, slow responses and comprehension problems may occur, isolation and rejected by peers, sensitivity to loud sounds, touch and different clothing materials.

From the age of 7: difficulty adapting to a structured school routine, slow to dress and unable to tie shoes, underdeveloped drawing and drawing copying skills, inability to create more than one instruction at the same time, tendency to worry emotionally, insomnia, waking up at night and experiencing anxiety, poor knife-fork coordination.

From the age of 8-9 years: dissatisfaction in the education system, writing is a particular difficulty, secondary education results in poor data.

Treatment of dyspraxia

Dyspraxia requires treatment by a multidisciplinary team. The help of an occupational therapist, a physiotherapist, a psychologist, a neurologist, a speech therapist is needed. As for the part of speech therapy, for a more successful achievement, treatment is needed as early as possible. Treatment approaches that focus directly on improving language production can be classified as follows. Motor programming methods use the principles of motor learning, including the need for many repetitions of speech movements to help the child acquire the ability to accurately, consistently and automatically make sounds and sequences of sounds. Linguistic approaches focus on language learning disorders; these approaches teach children how to make word sounds and the rules when word sounds and sound sequences are used in a language. Combined approaches use both motor programming and language approaches. Sensory approaches include using the child's senses (eg, vision, touch) as well as gestures to indicate (or self-mark) some aspect of the target speech sound. Cueing is often used in conjunction with other approaches, such as motor programming (Hall, 2000). Rhythmic (prosodic) approaches, such as melodic intonation therapy, use intonation patterns (melody, rhythm, and stress) to improve functional speech production (Helfrich-Miller, 1984, 1994).

Research Question.

How well do teachers know some of the elements of dyspraxia?

Purpose

The main and only purpose of this research is to achieve results regarding the knowledge of teachers about the elements of dyspraxia.

Hypotheses

H1. Teachers see dyspraxia as a disability and therefore do not engage with such students. H2. Teachers manage to recognize dyspraxia disorder.

H3. Teachers have knowledge of the elements of dyspraxia. H4. Teachers have no knowledge of such a diagnosis.

Methodology

Sample:

The sample was selected in the capital city of the Republic of Kosovo, in Pristina, in the primary schools: Ismail Qemali, Iliria, Naim Frashëri, Shkëndija, Meto Bajraktari and preschool institutions: Hira, Luzëqeshja, Duart e Arta, Xixëllonjat, Zogjet e Vegjël.

Participants

Recruited Participants were teachers of the respective institutions and of the class level: preschool to third grade. Demographic data show that the average age is 39 years old and that the majority belong to the female gender (82.4%). Also, most of the teachers were not specialized for children with special needs (88.2%). Preparatory class teachers made up the majority of participants (39.7%), first class teachers (23.5%), second class teachers (19.1%) and third class teachers (17.6%).

Instrument

In this research, a self-created questionnaire was used, which is divided into three sections with a duration of 20-30 min.

- The first section includes demographic questions
- The second section includes 26 informative questions (25 closed and 1 open),
- The third section includes a self-created checklist that contains 24 characteristics of the three disorders Dyslexia, Dyslalia and Dyspraxia. The purpose of this checklist is to measure knowledge and enable teachers to distinguish between those characteristics.

Procedure

The study includes the assessment of knowledge on dyspraxia among teachers. Respondents were selected purposefully in certain institutions. Initially, permission was obtained from the directorate of the institution, and then before distribution, the purpose of this research was clarified to each teacher, as well as what was requested from them, and they were also thanked for their participation. The data collection were analyzed with the SPSS statistical package. Each teacher was assured that the data are confidential and will only be used for study purposes.

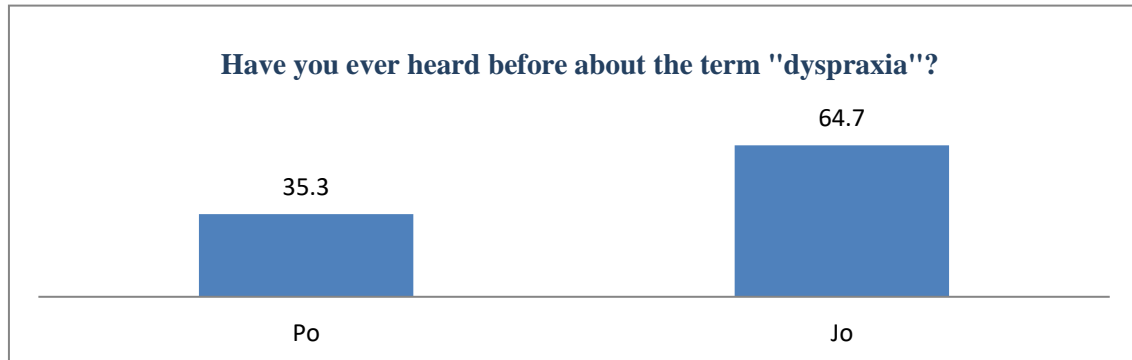
Results

Table 1. General descriptive tables

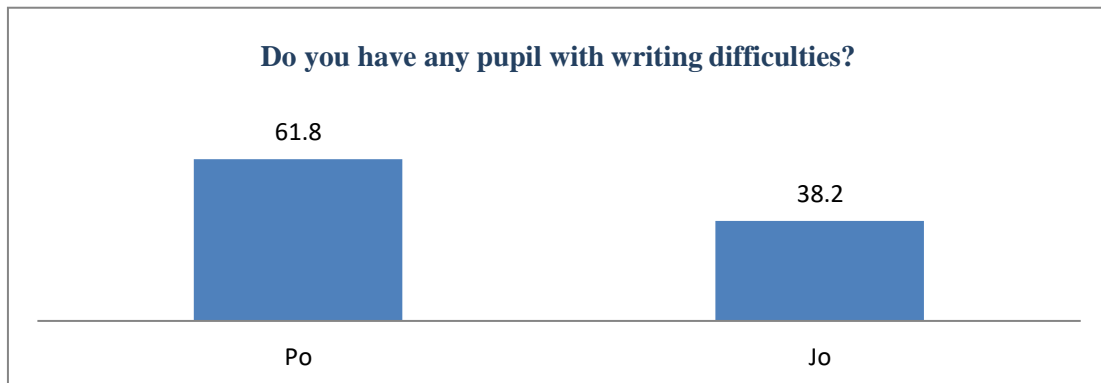
N		M	Max	M	SD	
	Mosha	68	22	64	39	11.15257
	Problemet në të shkruar	68	1	2	1.38	.48958
	Vështërsi në asocim	68	1	2	1.51	.50350
	Vështërsi me sjellje në shoqëri	68	1	3	1.38	.48958
	Organizim kohor/hapsinor	68	1	3	1.44	.50022
	Përqendrimi/vëmendja	68	1	3	1.91	.84173
	Veshmbathja	68	1	3	2.47	.76591

According to the descriptive table, it is reported that the total number of participants in the research is 68. The minimum age was 22 years, the maximum was 64 years, and the average was 39 years in terms of standard deviation 11.15.

Graph no: The term dyspraxia



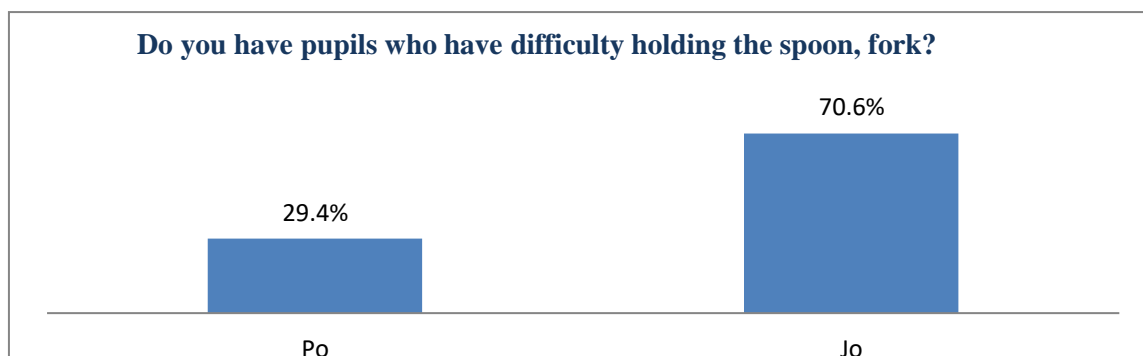
The results of graph no. 1 let us understand that the majority of teachers, 64.7%, have never heard of the term dyspraxia before.



Graph no. 2: Difficulties in writing

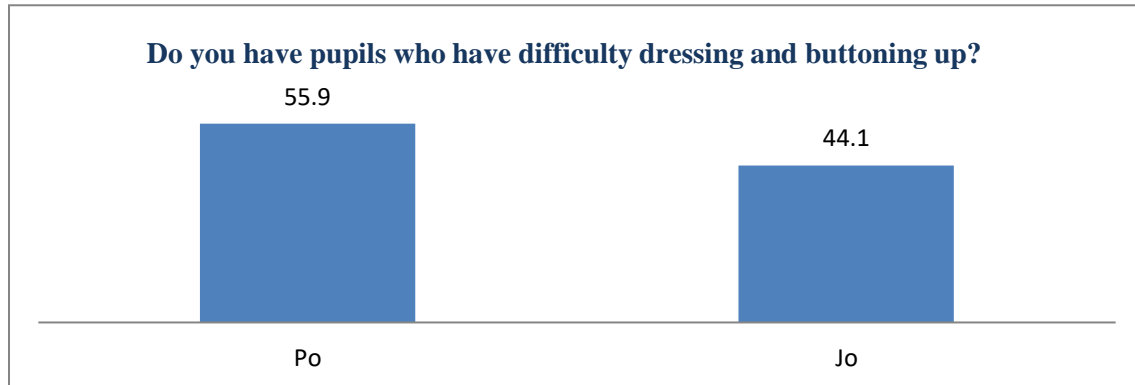
As for the difficulty in writing, the results of graph no. 2 emphasize that 61.6% of teachers have students with such difficulties.

Graph no. 3: Difficulty in holding a spoon, fork



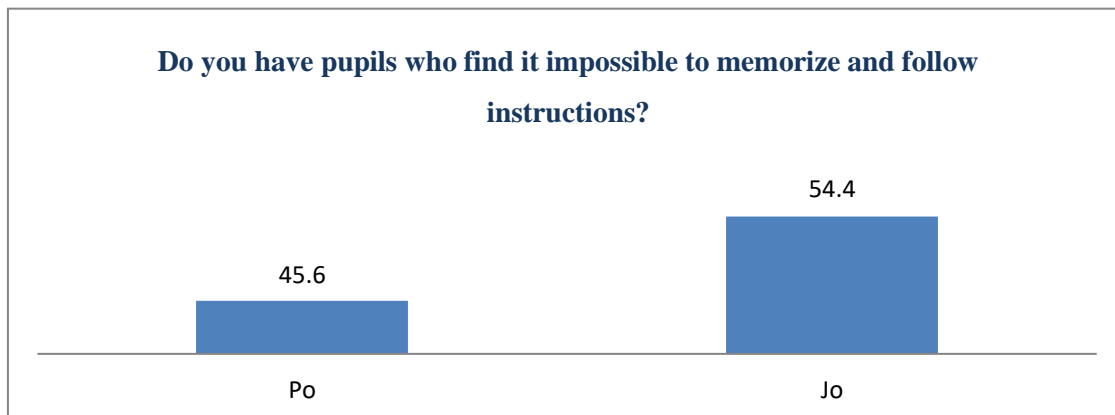
The data from graph no. 3 show that 70.6% of teachers do not have students with difficulty in holding spoon and fork.

Graph no. 4: Difficulties in fastening buttons



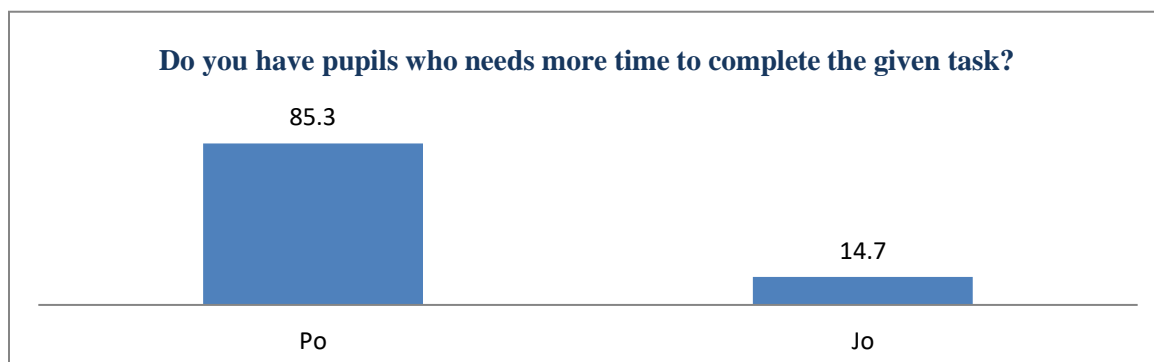
Graph no. 4 shows that 55.9% of teachers report that they have students with difficulty in dressing and fastening buttons.

Chart no. 5: Remembering and following instructions

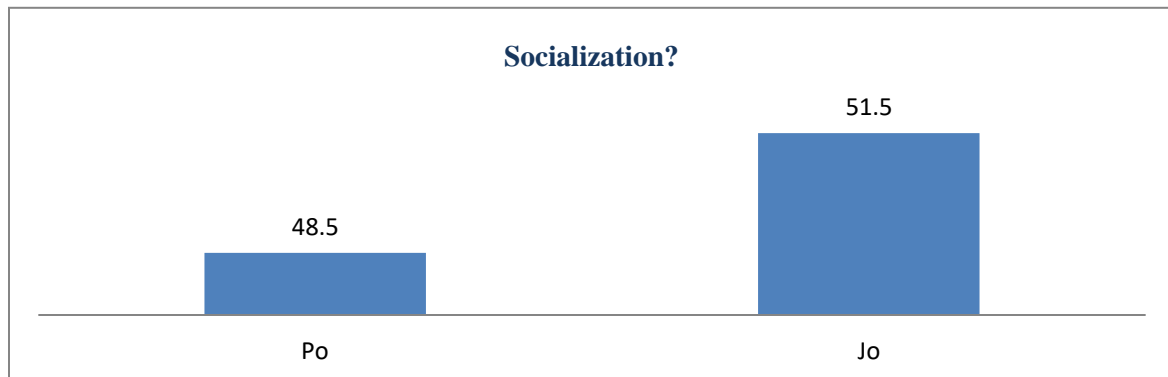


Graph no. 5 shows that the majority of teachers (54.4%) have students who are unable to remember and follow instructions.

Graph no. 6: Need for longer time to complete the tasks



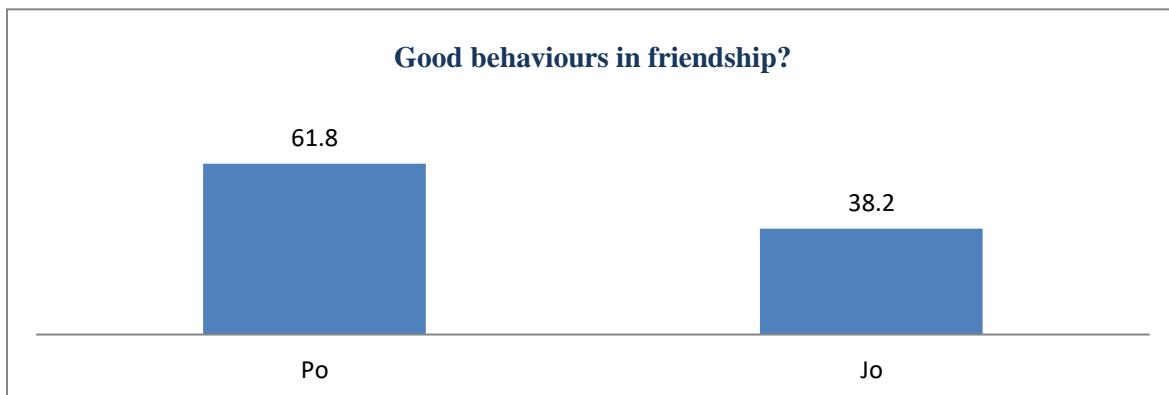
Graph no. 6 shows that 14.7% of teachers do not have students who need more time to complete the assigned tasks, while 85.3% of them have such students.



Graph no. 7: Creation/maintenance of the company

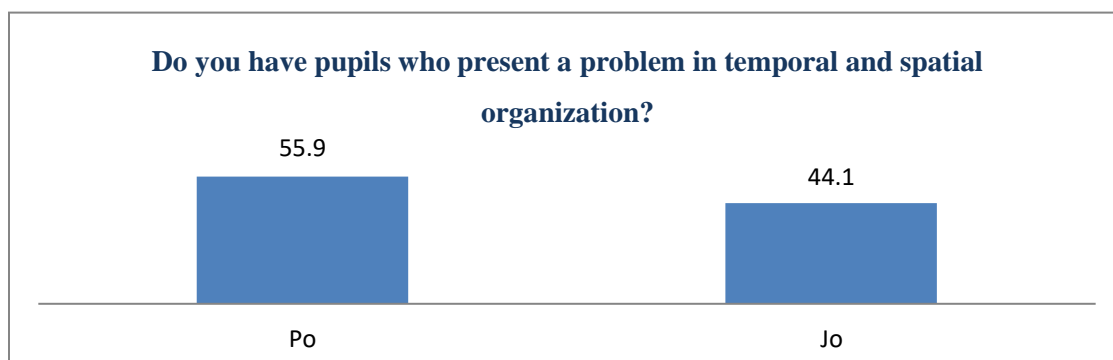
Graph no. 7 regarding the creation or maintenance of the company shows that 51.5% of the teachers declared that they do not have students with the aforementioned difficulty.

Graph no. 8: Appropriate behavior in society whereas, regarding appropriate behaviors in society

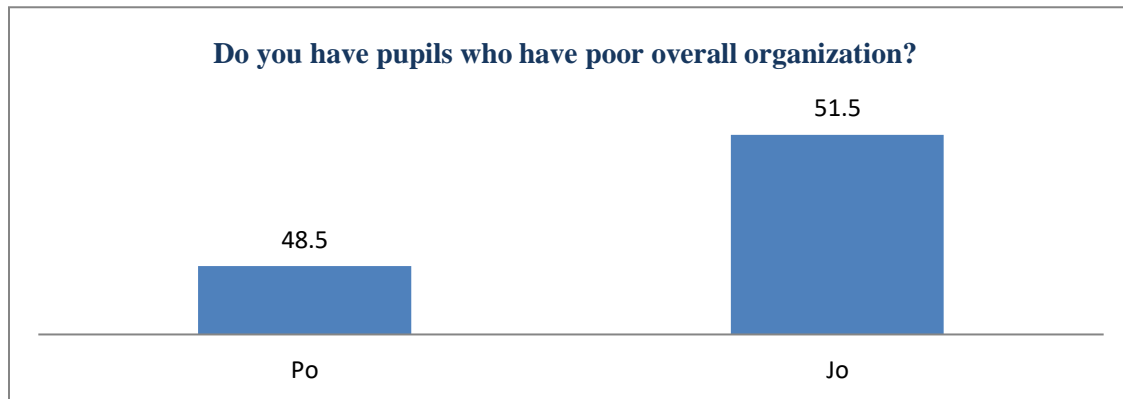


According to graph no. 8, the teachers declared that 61.8% of them have students with inappropriate behaviors in the social circle.

Graph no. 9: Time and space organization

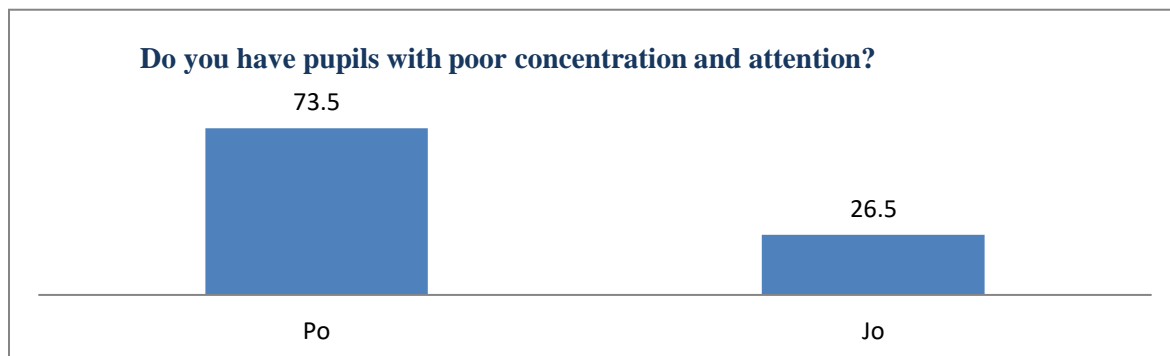


According to graph no. 9, it is emphasized that 55.9% of the teachers reported that they have students with difficulties in time and space organization.



Graph no. 10: General organization

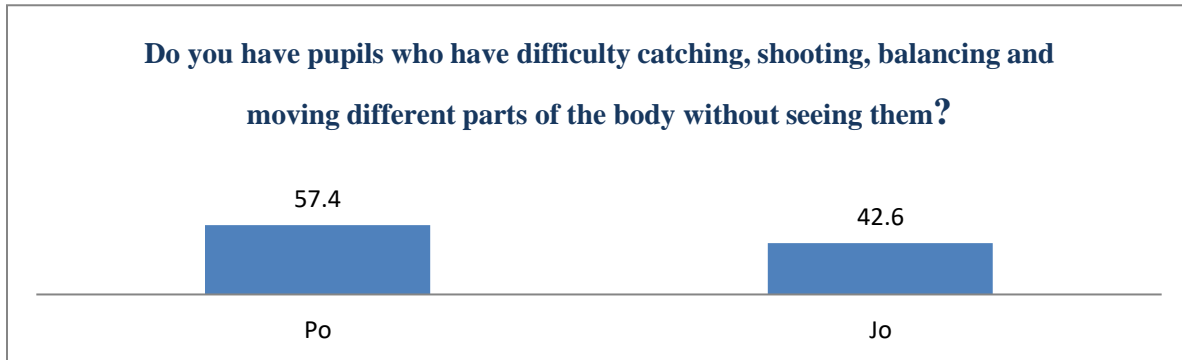
Graph no. 10 according to the results reports that 51.5% of the teachers reported that they do not have students with poor general organization.



Graph no. 11: Concentration and attention

Regarding poor attention and concentration, from graph no. 11 we see that 73.5% of teachers have reported that they have students with this difficulty.

Chart no. 12: Difficulties in catching, throwing, and balancing and moving body parts without seeing them



According to graph no. 12, we see that 57.4% of teachers have stated that they have students who present difficulties in catching, throwing, balancing and moving different parts of the body without seeing them.

Graph no. 13: Knowledge of teachers on the classification of dyslexia, dyslalia and dyspraxia disorders(CHEKLIST)

DYSLEXYA	• Difficulty in mathematics	52%
	• Instead of writing B, write P	52%
	• Instead of writing 25, write 52	61%
	• Difficulty in writing and especially in dictation	36%
DYSLALIA	• Improper pronunciation of sounds	25%
	• Not understanding the right words	98%
	• Difficulty reading aloud	63%
DYSPRAXIA	• Difficulty in dressing	50%
	• Crashing into objects and falling on them	51%
	• Weak fine motor skills	50%
	• Disordered eating	51%

According to graph no. 13, the results of the checklist regarding the teachers' knowledge of some elements of dyslexia show that 52% of them have knowledge that the difficulty in mathematics and the characteristics of confusing letters, for example, instead of writing b, writing p, belong to the disorder mentioned above, and also the majority of teachers, 61%, are aware that the characteristic of confusing the place of numbers, for example: instead of writing 25, writing 52, belongs to dyslexia, while a small percentage of teachers, 36%, have been identified for the knowledge of the characteristic of dyslexia: the difficulty in writing and especially in dictation. For dyslalia disorder, 25% of teachers have been identified as having knowledge that the element of improper pronunciation of sounds belongs to that disorder. A large part of teachers, 98% of them, are aware that not understanding the right words belongs to dyslalia, while 63% of teachers also know that difficulty in reading belongs to dyslalia. The knowledge of the teachers about the elements of dyspraxia according to the checklist shows that 50% of the participating teachers have knowledge that the difficulty in dressing and weak fine motor skills belong to it, while 51% of the teachers have knowledge that the elements: bumping into objects and falling on them and disordered eating belong to dyspraxia.

Discussions

As for hypotheses H1. where it is said that teachers see dyspraxia as a disability and therefore do not find engagement in such students and H.3 where it is said that teachers have knowledge about the elements of dyspraxia, they have fallen because, according to the teachers, they find engagement as much as they can with each child with disabilities and knowledge of the elements of dyspraxia is clearly seen to be lacking based on the checklist. As for H2. teachers manage to recognize the disorder of dyspraxia and H.4 where it is stated that teachers do not have knowledge of such a diagnosis are hypotheses that have been proven after analyzing the data where according to the results we conclude that a very small % of 35% have knowledge of dyspraxia. Hypotheses which according to Lopes and Crenitte (2012) state that teachers do not have a sufficient knowledge of learning disorders. The analysis of the results showed that teachers do not have sufficient knowledge about learning, reading, writing and articulation disorders and have difficulties in classifying them and their causes, or mentioning the problem they are facing. Such perception is decisive. To classify students regarding their reading and writing performance, so it becomes very important to know about learning disorders. When asked about learning difficulties, the teachers highlighted as possible causes: lack of interest, little effort, not presenting any significant importance regarding previous information or subsequent intervention. Another aspect observed was the reason for low academic performance. However, if children present any disorder or developmental deficit, they will have more difficulty attending classes that are theoretical and will therefore present misbehavior, lack of attention and in some cases aggression. Learning disorders can be alleviated, if the role and importance of the speech therapist is well understood. The lack of knowledge about this procedure was observed for 64.7% of the teachers who were asked if they had ever heard of the term dyspraxia. During the informative intervention, some questions were proposed by the teachers, who were interested in identifying learning disorders, in order to make effective references and, above all, pedagogical interventions that can guarantee the effect of learning for everyone students. According to Scoz (1994), learning problems are not limited to physical causes or psychological causes, nor to social analysis. It is necessary to understand them from a multidimensional focus. After the informative

intervention, the teachers confirmed that they will try to put to work all the resources that are available in the school, to help the children to learn and to overcome their difficulties, referring to the students in pedagogical coordination, also orienting mothers to send the child to a specialist, for a safe diagnosis and effective intervention.

Conclusions

Teachers do not present sufficient knowledge about learning disorders, and they do not know how to face with such problems. The results proved that their knowledge about learning disorders, their classification and related symptoms is superficial because during their academic education they did not have a course or any annex on the subject and then they did not have the opportunity to participate in any training on the disorder of dyspraxia or other disorders. According to teachers with as much knowledge as they have about disorders, a teacher may be able to detect a difficulty in a student and propose different activities and interventions effectively, but not even know what the disorder is. However, the formative intervention was undertaken in a short period in which there were some questions related to the relevant topic. The supporting material helped as reinforcement and also for future investigations, regarding the basic characteristics related to learning disorders. More research is needed on interventions to promote the interaction of teaching professionals.

Recommendations

Seeing that the results of the study show that teachers do not have knowledge about learning, reading, writing and articulation disorders and have difficulties in classifying them and their causes, or mentioning the problem they are facing and with the request of teachers when they were asked how we can help them with dyspraxia we conclude that it is necessary to hold trainings, lectures and seminars on dyspraxia for teachers so that they have enough knowledge to distinguish dyspraxia in their students. Adaptations related to teachers' methodology, improvements to the scholastic environment and positive interventions that help the learning process, are procedures that the teacher can carry out to guarantee effective learning even for dyspraxic students. Teachers can help a child with dyspraxia by supporting in writing, in the visual part, giving students more time to complete the task, by positioning it in the right place inside the classroom, for example: a child with dyspraxia finds higher concentration if they are seated in the front of the classroom, when they are distanced from the doors, windows creating a list of behavior in the classroom where other children will be more empathetic towards students with dyspraxia, engaging him more in the fine motor part, physical typing can be replaced by a keyboard, etc. Then, a continuation of the study on the identification of dyspraxic students is recommended, as well as a study on the benefit of knowledge for the % of students with dyspraxia in our country.

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