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## **Prevalence of Learning Difficulties with Dyslexia in Higher Education Students**

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### **Abstract**

The purpose of this paper is to shed light to learning difficulties in higher education students. More precisely, to understand the prevalence of these learning difficulties in students. Through literature and research, both domestic and international, this research incorporates the factology and decomposes it in the best possible way from a professional point of view. The research is quantitative, has an analytical and comparative approach. It was realized in 15 Universities of the Republic of Kosovo. As a random sample there are 200 professors of these universities, whose opinion has been decisive for this research. Data collection was carried out through a quantitative approach, while the measuring instrument is the questionnaire for professors, which was taken from (NCLD, 2017) authors of which after conducting their research provided that 15 million students, adolescents, and adults with learning difficulties can be successful in university, work and in life. The data was analyzed through the program SPSS v.22 and through these analyzes the correlation between the learning difficulties and the professional training of professors in this aspect was seen. Data analysis was performed through three tests, respectively correlation test, Hi2 test as well as factor analysis, tests that have led us to the conclusion that learning difficulties are present in university students in Kosovo. The assumption that professors do not have sufficient preparation to deal with students with such difficulties has been refuted as professors have proven otherwise. Dyslexia and dysgraphia are the most common difficulties encountered in university students, but even dyscalculia and dyspraxia do not lag behind. During the analysis, another variable found which has not been the subject of study, is that such difficulties significantly affect the performance of students in the classroom. The combination of all reduces the motivation of students for work.

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## **1. Introduction**

Life and university are made up of a variety of human colors and variegations. The heterogeneity of needs and abilities puts the university in front of constant challenges which, like humanity, are constantly evolving. In accordance with the needs and abilities of everyone, the university provides a suitable environment or in other words offers inclusive education. Inclusion in education aims to include all students regardless of race, gender, ethnicity, disability or any other difference in the nearest regular university. Giving the student a positive feedback in the classroom, praising him for the achievements, but above all appreciating his efforts, the student with learning difficulties is encouraged to be more active and to participate more willingly in university activities. Inclusion in most cases is related to social non-exclusion. It is usually defined as a society in which all individuals feel valued and their basic needs are met, despite their differences, as such differences are respected and treated as contributing factors to diversity [40].

As exclusion occurs very early in life, inclusive education is one of the most important mechanisms that will ensure the promotion and expansion of the concept of inclusion. Moreover inclusion is considered as one of the essential requirements for a democratic society and contributes strongly to the context of mental health [23]. According to [46], inclusive education means an education system that includes all students, welcomes and supports them to learn regardless of their abilities and needs, no one is expelled from university, and everyone is part of it, including students with disabilities in learning [46]. Each university has its own culture which determines the approach of professors to work with students, especially those with learning difficulties.

A study has shown that if there are professors in a university who work with students with learning difficulties, then colleagues are automatically stimulated to accept such students in their classrooms, such a commitment and positive attitudes can break resistance of the old mentality with special universities [13]. The journey to becoming an "inclusive university" can be long and challenging at times, but in the end the journey strengthens the university community and benefits everyone. "Involvement" does not only mean the inclusion of students with disabilities in regular classes, but this process implies fundamental changes in the way the university community supports the needs of each student. In such universities not only students with learning difficulties benefit, but also students without such difficulties have the opportunity to thrive [19]. Inclusion as an educational philosophy is relatively new in Kosovo, both as a concept and as a practice. This concept and this practice came to Kosovo after 1999 along with other educational reforms. [24]. Reading, writing and pronunciation turn out to be complex tasks for students, even for the vast majority who learn these processes without much difficulty. But for some others the letters, numbers, syllables, words, simple mathematical operations, can be turned into real labyrinths thus displaying what are classified as learning disorders [18]. Recently there has been a greater awareness of the population regarding these difficulties as we now have numerous and fast ways of obtaining relevant information. Various studies in the US estimate that about 5% of public university students (2.7 million students) are affected by a learning disability and that half of students with special needs who receive support and treatment are those with disabilities in learning [35]. The following chapters will review the literature on learning difficulties, which has been taken from various authors both local

and foreign, including books and various scientific research. After the literature the next chapter contains the working methodology which includes the research sample and the measuring instrument. Also explained are the various tests that have been used through the SPSS v.22 program to analyze the data that send us to the results of the paper. After analyzing the data, the fourth chapter explains the conclusions drawn from the research conducted, among others in this chapter are included the limitations of the research as well as research that may be conducted in the future based on the same research. And the last chapter of this paper are the appendices where part of it is the questionnaire with statements that help the research. Reading, writing and pronunciation turn out to be complex tasks for students, even for the vast majority who learn these processes without much difficulty. But for some others the letters, numbers, syllables, words, simple mathematical operations, can be turned into real labyrinths thus displaying what are classified as learning disorders [18]. Recently there has been a greater awareness of the population regarding these difficulties as we now have numerous and fast ways of obtaining relevant information. Various studies in the US estimate that about 5% of public university students (2.7 million students) are affected by a learning disability and that half of students with special needs who receive support and treatment are those with disabilities in learning [35].

### ***1.1 The purpose of the research***

Given the key role of the teacher in the learning process, his professional preparation influences the management of situations with such students in the classroom. Based on all this, this research aims to understand the prevalence of learning difficulties in university students.

### ***1.2 Research questions and hypotheses***

1. How prevalent are learning difficulties prevalent among university students?
2. How prepared are professors for the proper treatment of these difficulties?
3. Which of the learning difficulties are most often shown to students?

***Based on the research questions, three hypotheses have been put forward:***

H1 - Learning disabilities are widespread among university students.

H2 - Professors do not have sufficient professional training to properly address these difficulties.

H3 - Dyslexia and dysgraphia are the most common difficulties in students.

## **2. Literature review of an overview of learning difficulties**

Learning difficulties for students represent the impossibility of proper acquisition of academic skills such as: writing, reading, solving mathematical problems and coordination of motor movements. Various researches show that in every country of the world there is a sufficient percentage of learning difficulties. Without going too far in Italy, in a study with a sample of 1774 students in 94 fourth grade elementary universities, the results

showed that the prevalence of learning disabilities is around 3.2% [4].

Some of the characteristics of students with learning difficulties are:

Low self-esteem; Non-positive self-concept; Have feelings of anxiety and frustration; Emotionally fragile; Get tired quickly and feel helpless [18].

Difficulties in spelling, reading, math can manifest in various forms throughout a student's university performance. They can only be of one type or combined and associated with each other. The response that the child gives to this, to his own situation, and to the predicament that these difficulties cause, is directly related to self-esteem and self-concept. The way a child chooses to adapt to his or her university performance is often misunderstood by adults as lack of motivation, lack of desire, laziness or disengagement from universitywork (Erickson, 2013). Në këto kushte fëmija vendoset vazhdimisht nën tryzni nga prindërit dhe mësuesit, duke u gjendur përballë përgjegjësisë që nuk bëjnë gjë tjetër vetëm sa i përkeqësojnë problematikat e fëmijës dhe rëndojnë simptomat e vështirësisë. Të gjitha këto presione mbi fëmijën ndikojnë jo vetëm në performancë akademike në shkollë, por edhe kanë ndikim tejet të madh mbi gjendjen emocionale e psikologjike të tij [18].

According to [39] early intervention turns out to be successful in 90-95% of cases, thus preventing further progression of difficulty and most of these students will reach a level of lecturer, writing or mathematical skills at a level close to the parameters of rate. [39] Such an opinion is also supported by [50] and Yoshikawa where they say that there is a lot of room for immediate intervention as students are involved in many different activities and games; hence immediate intervention can come in the form of entertainment [49].

According to the DSM-V Diagnostic and Statistical Manual of Psychological Disorders, learning disabilities belong to the group of neurological developmental disorders, along with those of communication and motor disorders [3]. Listed below are the respective learning disorders according to DSM-V with typologies, specifics and characteristics of each of them:

A. Difficulty in learning and using academic habits, which have been noted by the presence of at least one of the following symptoms, which have continued to be present for at least 6 months, despite interventions towards these difficulties .

1. Inaccurate or slow reading of words and in a forced way (eg can read the words aloud, with mistakes and dividing them into syllables, difficulty in expressing the words well).
2. Difficulty in understanding the meaning of what he is reading, can read a text accurately but fails to identify the full and deep meaning of what he is reading.
3. Spelling difficulties, e.g. can add, remove or replace vowels or consonants.
4. Difficulty expressing oneself in writing, e.g. makes many grammatical or punctuation errors, does not organize thought well in paragraphs and sentences, ideas are not clearly expressed. Vështirësi për të përvetësuar kuptimin dhe përdorimin e shifrave, të dhënat e shprehura me numra ose llogaritje, p.sh. i kupton gabim numrat, njesitë dhe marrëdhëniet mes tyre, numëron me gishta për të mbledhur numrat njëshifrorë, hutohet dhe përhumbet në llogaritjet matematikore dhe i ndërron vendin numrave gjatë

veprimeve me to.

5. Difficulties with mathematical reasoning (eg there are many difficulties to apply theoretical mathematical concepts in practice when solving arithmetic problems).

Impaired academic habits and skills are qualitatively lower than the average level of chronological age of the individual, interfere with university performance or daily life and are evidenced by standardized tests and measurements administered during the assessment process. In individuals over 17 years of age, the history of documenting learning difficulties can be replaced by appropriate assessments. Learning difficulties appear at school age, but may not become fully apparent until academic demands exceed the individual's impaired abilities (e.g., in final exams, reading, or writing long, complex assignments). defined by deadlines). Learning difficulties are not explained differently by visual or auditory deficits, mental retardation, other developmental or neurological disorders, psycho-social differences, or by inadequate academic education and orientation.

B. These four criteria must be met for the individual to be diagnosed with any of the difficulties by adding to this a clinical synthesis of the individual's history (developmental, medical, family, and educational). Some of the behaviors that can predict the presence of learning difficulties are:

### **2.1 Dyslexia (difficulty reading)**

The etymology of this word expressing disorder means difficulty in speaking or pronunciation. In fact, dyslexia is related to difficulties that manifest in the field of writing, reading, spelling and spelling, where especially students do not manage to distinguish letters well, cannot memorize them, do not combine syllables correctly and do not structure well words through sentences. In this way their reading and writing turns out to be inaccurate and erroneous [18]. It is a learning disability that has nothing to do with intellectual capacity, which often presents a difficult but also insurmountable problem. The difficulties of dyslexia according to [20] are explained by the deficits that dyslexic students may have in the perception and sensory processing of information, adding to the lack of experience and proper practice of reading and writing activities [20].

Dyslexia contains features which do not all appear at the same time. Since most of them relate to the university context, the main features of dyslexia will manifest over time in different ways. However, low performance on pre-university cognitive skills and habits, which are associated with short-term verbal memory, phonological development, and visual language flexibility and visual perception, are somewhat predictive of dyslexia [7].

**The Neurological Factor** [8] suggest that in the case of typical readers, neural networks are better connected and function in a more coordinated manner than in the case of dyslexic readers. Images that come from magnetic resonance imaging of the brain in cases of dyslexia, have shown that at the neuroanatomical level deficits are not specifically in the processes of reading, but more in the executive functions related to visual and auditory processing of information [8].

**Cognitive factor** - perception of visual stimuli, information processing, decoding of verbal messages and working memory are some of the many cognitive elements present in the processes of spelling, reading, spelling, and linguistic reproduction. Evidence from various studies shows that dyslexic students have difficulty

perceiving visual stimuli, but not when they are detached, but when accompanied by verbal ones. It means that these students do not have difficulty in visually identifying letters or syllables, but if they are labeled as words or names, then they appear unclear in reading, so their problem is not conceptual but technical [18].

*The question is whether dyslexia is hereditary or depends on the stimuli of the environment in which it operates?*

Many studies have focused on answering this question, one of which states that parents of dyslexic students exhibit different cognitive, emotional and behavioral profiles compared to other typical parents [5]. Based on this we understand that these parents show a predisposition not to be good at reading and thus cannot help their students or orient them properly. So what may be an inherited factor automatically turns into an unfavorable environmental factor. A group of Dutch researchers followed 180 students who came from families with one of their parents, older brothers or sisters who are dyslexic and in parallel followed 120 students who had no genetic predisposition to display dyslexia. The two groups were monitored in parallel from the age of 2 months to 9 years regarding language, visual, cognitive development and later reading and writing skills. What was observed from all this was that students coming from a dyslexic family background had lower performance in terms of written and spoken language? In parallel with this fact, the evidence shows that the parents of dyslexic students who may have had problems in university performance in terms of learning, are also adult individuals who read very little or not at all [43].

*Is the onset of dyslexia the same in all languages of the world?*

Numerous studies have shown us that readers of alphabetic languages such as English have greater reading and writing difficulties than logographic languages such as Chinese [42]. Albanian is also one of the alphabetic languages, therefore Albanian students are included in the largest group of dyslexics and dysgraphics.

After typical students and readers master the process of reading through both visual and phonological ways, then based on the dominant reading path, dyslexics are divided into two types: phonological dyslexia - the visual way of reading is used, as well as visual dyslexia - in which the phonological way of reading is used [50]. The student with phonological dyslexia has some of these features:

Difficulty reading new and unfamiliar words; Replacing some difficult words with some similar ones; Difficulty in working memory during university activities; Improper use of vocabulary; While the visual one has some of these features: Very slow reading; Numerous spelling mistakes; Difficulty in orientation, left-right, in names, in mathematics, etc. [18].

To understand that we have dyslexia we first take information about personal anamnesis, and then begins with neuropsychological assessment: perception, motor skills, cognitive functioning, psychomotor, psycholinguistic functioning, language and emotional development which are measured through various tests such as Bender test which is related to the reproduction of geometric figures that appear in order, then we have the WISC-R intelligence test which is divided into two parts, the part which is related to numerical operations, arithmetic, symbols and especially in the linguistic part, dyslexic students get less points, then we have the ITPA-3 tests

(Illinois Test of Psycholinguistic Abilities) and PPVT (Peabody Picture Vocabulary Test), which assess the polylinguistic construct, measure the enrichment of the individual's vocabulary, etc. [18]. Dyslexics the most common problem they express has to do with spoken and written language, which is assessed through observation of these elements, abbreviations (eg book-book), returns (wall-rumi), substitutions (plate -plate), additions (sheets-sheets), confusions etc. Then the rhythm of reading is carefully monitored, whether it is slow, fast, normal or linear, and the level of reading is examined whether it is mechanical or gives meaning to what it reads, it respects the punctuation marks, ie whether it is a reading logical [12]. Emotional difficulties are secondary to these students but should nevertheless take place at the moment of planning intervention strategies. Various studies show that these students show poor socialization even before entering university, therefore after the anamnesis the history of emotional development is also important [33].

## ***2.2 Dysgraphia (difficulty in writing)***

Writing is a learned, purposeful, and conscious process that seeks to communicate something to others. Many cognitive processes participate during writing, such as: organization, planning, memorization, verbal decision-making, coordination of all of them is the complexity of writing, while their lack of coordination shows us the difficulty in writing [18]. Digraphia is a learning disability that affects writing ability, excellent motor skills and information processing skills. This particular difficulty can manifest in different ways in people of all ages. In all cases of dysgraphia, writing takes up large amounts of energy and concentration [6]. Dysgraphia is the second type of learning disorder. It is not about differences in the meaning and content of the word, but about difficulties and problems related to the form of writing, direction and order. In the case of dysgraphia, the motor aspect of writing is affected, the one that is responsible for performing movements during the writing process. The difficulties of writing are of two types: dissertation, which affects the content of the writing and dysgraphia, which affects its form [18]. Regarding the age when the assessment regarding the difficulties of writing can be done, it is considered more appropriate to be the end of the first grade or even the second grade. It is not a question of making a full assessment at this age, but what can be clearly seen is whether the child has a tendency to develop later problems in writing, ie if there are elements of dysfunction of the writing form, ie dysgraphia or may exhibit impairments in the ability to reproduce the written word i.e. spelling [48]. In a study conducted with 259 students aged 13-14 years it was found that if the child has learning difficulties such as dysgraphia then there are impairments in other neurological functions [21]. While in another study conducted with 66 students who were hospitalized in the neurological pediatric ward because they could not achieve proper success in university, they underwent more detailed neurological tests including a full assessment of hand function. It was found that dysgraphia students failed to perform the function of capturing objects by hand like students with normal development and that 30% of them belonged to the male gender [32]. Dysgraphia makes the writing process difficult and the product is often blurred, often the letters are either too large or too small, their shape is more simplified, the space is too large or the writing is too tight, sometimes they press the pencil many or write very easily which makes their writing unreadable. It happens that this changes when the child grows up or there may be consequences that extend to adulthood, leaving them behind in writing or with other fine motor skills. Not only students who have this difficulty in writing expend a lot of energy, but also typical writers should have some functional skills such as: organization, attention to detail and constant dedication [17].

### **2.3 Dyscalculia (difficulty in mathematics)**

Creating a sense of numbers is about being able to recognize and operate on them. It is considered that this competence is innate and present in many species of animals, which have numerical abilities without learning or practicing them [1].

Unlike writing and reading which are considered as social and cultural "inventions" and are based on education and learning, counting and interacting with them have certain neural bases and are the result of evolution [45].

According to Pisa, the child begins to count without having properly crystallized the notion of number, at first the child connects numbers with objects knowing that the word "one" corresponds to the object and the word "two" corresponds to two objects. From this we understand that mathematical intelligence precedes that of language and at the beginning of its enumeration. The child does nothing but reproduce what he hears from the adults. Stable concepts on numbers and actions on them the child does not form until the age of 5-6 years. So man is born with predispositions to learn mathematics, but it happens that mathematical skills may be impaired and the appearance of discrepancy or difficulty in mathematics may arise. During an experiment conducted on students aged 6-8 months Starkey together with other authors identified the presence of differentiation habits of different objects based on quantity and according to the numbers presented. The students observed longer and paid more attention when presented with images containing objects different from the beginning, not only in ascending order (from 2 to 4), but also in descending order (from 4 to 2).

Dyscalculia is a specific learning disorder which is associated with the emergence of difficulties in mathematical skills, with the recognition and use of mathematical skills, performing arithmetic operations, identifying and understanding numerical sums. These skills are impaired in the case of dyscalculia, which means that these students present low performance in mathematics and encounter many obstacles in this subject during their university progress. They have difficulty remembering even very simple mathematical procedures and very poor working memory when reasoning on numbers. They find it very difficult to make progress in mathematics as their mathematical logic is at basic beginner levels. Even when they achieve some improvements in a short time, they find it very difficult to consolidate those changes and continue to progress, but forget what they have learned [18].

There are three types of discrepancy:

- a) Lexical dyslexia or otherwise dyslexia of figures. It is characterized by linguistic deficits in mathematics, numerous difficulties in reading numbers correctly, eg number 2 reads 9, or number 52 reads 56.
- b) Procedural dyscalculia. Inability to follow the sequence and logic of mathematical operations.
- c) Arithmetic dyscalculia. Inability to memorize even very simple mathematical operations, e.g.  $10 + 30$ :  $40/2$ :  $50 \times 2$  (Erickson, 2017).

There is evidence that dyscalculia has a genetic basis. The results of a study that analyzed data from families

with students with math difficulties showed that siblings of students with this disorder are 5-10 times more likely to be affected by dyscalculia than the average population [2].

#### **2.4 Dyspraxia (difficulty moving)**

In the absence of recognition of any known neurological problem or intellectual impairment, dyspraxia implies disorder in the planning, organization, and execution of movements. It can be congenital or acquired [31]. Positive attributes of dyspraxia include resilience and determination to succeed. From different experiences two main points of dyspraxia have been emphasized, one that has to do with the strengths of the individual, to preserve them as much as possible and the other has to do with the weak points, to work as much as possible in the improvement their [49].

The person with dyspraxia shows difficulties in coordinating movements, in the brain as well as problems in some cognitive skills. Dyspraxia affects the body's immunity and nervous system. According to the International Center for Learning Disabilities, individuals with dyspraxia show difficulty in planning and performing motor tasks in an excellent manner, this means that from simple movements such as "Hand greeting", to the most complex ones such as "brushing teeth" [30]. If the child has dyspraxia then what can be noticed is that he exhibits unusual body positions, excessive nervousness, excessive sensitivity to loud noises, problems with sleep and eating, and a high level of leg and arm movements [36]. Various studies show that dyspraxia often occurs together with autism or alone, but also often confused with each other, because they have common signs. Dyspraxia cannot be cured, but people can live with it satisfactorily. Studies show that proper treatment of dyspraxia helps them to improve muscle toning and coordination. Individual sports such as swimming or cycling keep the child active and remove obesity. Also putting beans in the bag, improves eye-hand coordination. Simple interventions not only reduce the intensity of dyspraxia, but also increase communication skills [22]. There are two subtypes of dyspraxia, speech apraxia in students and oral dyspraxia, which are related to a neuromuscular deficit. The essential impairment turns out to be in the temporal programming of the mouth movement which affects the prosody of the sound, and the formation of unwanted mouth movements and gestures [38]. Every child is unique and learns in their own way, the special bond of the parent with the child encourages the child even more to work on reading, writing and math [17], as well as on improving motor movements.

### **3. Methodology**

The research belongs to the quantitative type through which we have addressed the prevalence of learning difficulties, precisely for university students. The research has an analytical and comparative approach where the influence of factors on students' learning difficulties is addressed, which are addressed through the opinion of professors. The opinion of professors has been crucial in carrying out the analysis and conclusions. The reason why this method was chosen lies in the fact that it is one of the most appropriate forms of realization, which highlights the positive and negative sides, thus offering opportunities for real results.

### 3.1 Samples

Participants in this research were university professors in the Kosovo, which included urban and rural areas of this region. The participating universities in the research were: "Ukshin Hoti", "FAMA", "Hasan Prishtina", "Universum", "Haxhi Zeka", "Fehmi Agani", "Kadri Zeka", "Isa Boletini", "Rochester Institute in Kosovo", "Heimerer", "UBT", "Riinvest", "Rezonanca", "Dardania" and "European Dukagjini". A total of 200 professors from 15 universities participated in the research. Below is a table with the participating universities along with the number of professors involved in this research.

**Table 1:** description of the research sample

University	N
"Ukshin Hoti" - Prizren	14
"FAMA" - Prizren	27
"Hasan Prishtina" - Prishtine	31
"Universum" - Prizren	16
"Haxhi Zeka" - Pejes	10
"Fehmi Agani" - Gjakoves	12
"Kadri Zeka" - Gjilan	7
"Isa Boletini" - Mitrovice	7
"RIT" - Prishtine	10
"Heimerer" - Prishtine	10
"UBT" - Prishtine	7
"Riinvest" - Prishtine	9
"Rezonanca" - Prishtine	20
"Dardania" - Prishtine	10
"Evropian Dukagjini" - Prishtine	10
	200

### 3.2 Research instrument

The instrument has a total of 49 questions along with the demographic part. In the first part demographics are the questions (name of the institution, place of work, age, level of education and work experience while in the second part are specific questions compiled specifically for this study which were taken from (NCLD, 2017).

### 3.3 Data collection procedure

After setting the topic for research and some other issues related to the project, the next work was to submit a request for obtaining consent from the MED (Municipal Directorate of Education), to conduct research in public universities of the Kosovo. After the approval by the competent bodies I started the administration of the data, which was realized during the month of March 2022, where the questionnaire was distributed in the universities of the Kosovo. The time for completing the questionnaire was 25-30 minutes, so I stayed in the facility until the

questionnaires were completed. While conducting the survey, I tried to apply the ethical principles of the research, explaining to them how to complete the questionnaire, the purpose of the research, taking into account confidentiality. Respondents participated in the survey willingly and willingly, leaving no questions unfinished. After receiving the questionnaires, the data were placed in Excel and then in SPSS v.22 which were then analyzed with the appropriate methods, described below. After analyzing the data, conclusions and recommendations were drawn, works which were from the beginning of the research. To achieve this I first analyzed the descriptive data of the participants presenting their opinion in percentage, then I used the Pearson correlation test and factorial analysis to validate the hypotheses. Through these analyzes, the prevalence of learning difficulties in university students has been highlighted.

### ***3.4 Data Analysis and Results***

The fourth part of this research presents the analysis of the data and the results obtained from these analyzes, presented in percentages which increases the reliability of the research in question. First, the demographic data of the participating respondents were analyzed, then their answers to specific questions regarding the prevalence of learning difficulties.

Quantitative data were analyzed through statistical methods by applying the program SPSSv.22. Initially, the descriptive data were analyzed, presenting the opinion of professors in numbers and percentages, through relevant tables and figures. Correlation test (Pearson), Hi2 test, and factor analysis were applied to confirm the hypotheses. Through these three tests it has been achieved to highlight the learning difficulties and the impact that these have on students' academic achievement. The level of margin of error used to validate the hypotheses is 0.01 and 0.05, which indicates that the questionnaire used to validate the hypotheses has a high degree of reliability. Through the correlation test the first hypothesis was tested where the connection between learning difficulties and the impact that these difficulties have on students' academic achievement was highlighted, while through the Hi2 test the second hypothesis was tested where it was analyzed whether professors are sufficient. informed to address the difficulties of students in learning, while through the test of factor analysis the third hypothesis was tested, ie it was analyzed whether dyslexia and dysgraphia are the most common difficulties among students in universities in the Prizren region.

### ***3.5 Descriptive results***

The second table shows the number of participants in the research, where there were a total of 200 professors from 15 universities in the Kosovo as shown below:

**Table 2:** Number of Participants

Universities	N
“Ukshin Hoti” - Prizren	14
“FAMA” - Prizren	27
“Hasan Prishtina” - Prishtine	31
“Universum” - Prizren	16
“Hachi Zeka” - Pejes	10
“Fehmi Agani” - Gjakoves	12
“Kadri Zeka” - Gjilan	7
“Isa Boletini” - Mitrovice	7
“RIT” - Prishtine	10
“Heimerer”- Prishtine	10
“UBT”- Prishtine	7
“Riinvest”- Prishtine	9
“Rezonanca” - Prishtine	20
“Dardania”- Prishtine	10
“Evropian Dukagjini”- Prishtine	10
	200

In the statement: "Easily distracted by external influences" we understand that 16.5% of participants fully agree, 27% of them partially agree, 28.5% hold a neutral position, 18% partially disagree and 10% do not agree at all. Exactly 72% of professors agree that their students do not have a stable concentration in the learning process, and are influenced by any influence that comes from outside. This is a statement that makes us realize that the effect of classroom learning is often lost.

**Table 3:** Easily distracted by external influences

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	33	16.5	16.5	16.5
	I partially agree	54	27.0	27.0	43.5
	on the average	57	28.5	28.5	72.0
	I partially disagree	36	18.0	18.0	90.0
	I do not agree at all	20	10.0	10.0	100.0
	Total	200	100.0	100.0	

In the statement: "He is clumsy, spills and drops things from his hands", 11.5% of professors say they fully agree, 14.5% partially agree, neutrally say 28.5% of participants, 24.5% partially disagree and 21% do not agree at all. As can be seen from the above percentages most professors do not agree that they have identified such a characteristic in their students. So students are agile in this regard.

**Table 4:** Is clumsy, spills and drops things from hands

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	23	11.5	11.5	11.5
	I partially agree	29	14.5	14.5	26.0
	on the average	57	28.5	28.5	54.5
	I partially disagree	49	24.5	24.5	79.0
	I do not agree at all	42	21.0	21.0	100.0
	Total	200	100.0	100.0	

In the statement "There are problems with pressing buttons, in performing various activities with hooks, clasps, chains and fails to tie shoes", 9.5% of professors say they fully agree, 14.5% partially agree, 26.5% of them are neutral, 24% partially disagree and 25.5% disagree at all. From the used literature we have seen that this activity is usually done to identify the difficulty of movements, thus the answers of the respondents let us know that this difficulty does not have a high prevalence in students, but is still present.

**Table 5:** Fails to perform activities that require finger dexterity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	19	9.5	9.5	9.5
	I partially agree	29	14.5	14.5	24.0
	on the average	53	26.5	26.5	50.5
	I partially disagree	48	24.0	24.0	74.5
	I do not agree at all	51	25.5	25.5	100.0
	Total	200	100.0	100.0	

The results of the statement "Holds the pencil improperly, resulting in poor writing", show that 12% of professors fully agree, 22.5% partially agree, 16% hold a neutral stance, 24.5% partially disagree and 25% disagree aspak. Thus we understand that in total 34.5% agree, 16% of them are neutral and 49.5% of them disagree, which means that mostly students hold the pencil in the right way and write well.

**Table 6:** Holds the pencil improperly, as a result there is poor writing

Valid	I completely agree	24	12.0	12.0	12.0
	I partially agree	45	22.5	22.5	34.5
	on the average	32	16.0	16.0	50.5
	I partially disagree	49	24.5	24.5	75.0
	I do not agree at all	50	25.0	25.0	100.0
	Total	200	100.0	100.0	

In the statement: "There are difficulties in using small objects or items that require precision (eg, lego, puzzle, tweezers, scissors)", we see that 13% of professors fully agree, 17% of them partially agree, 27.5 % are neutral, 21% partially disagree and 21.5% disagree at all. What we can conclude from these results is that students manipulate such objects relatively well, which suggests that fine motor movements function properly in students.

**Table 7:** There are difficulties in using small objects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	26	13.0	13.0	13.0
	I partially agree	34	17.0	17.0	30.0
	on the average	55	27.5	27.5	57.5
	I partially disagree	42	21.0	21.0	78.5
	I do not agree at all	43	21.5	21.5	100.0
	Total	200	100.0	100.0	

In the statement of Table 16: "Demonstrates delay in speaking", we see that 12% of professors fully agree, 21% partially agree, 29.5% of them are neutral, 15.5% strongly disagree and 22% strongly disagree. Since most professors are neutral towards this statement, then we conclude that speech delays are present in university students, but professors do not consider them as insurmountable delays. With a little professionalism they probably leave altogether.

**Table 8:** Demonstrates speech delays

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	24	12.0	12.0	12.0
	I partially agree	42	21.0	21.0	33.0
	on the average	59	29.5	29.5	62.5
	I partially disagree	31	15.5	15.5	78.0
	I do not agree at all	44	22.0	22.0	100.0
	Total	200	100.0	100.0	

In the statement: "It is difficult to retell what has just been said", 14% of professors say they fully agree, 22% partially agree, 26% are neutral to this statement, 18% partially disagree and 20% do not agree at all. Overall we conclude that when working with their students, professors usually get good feedback from what has been said earlier in the classroom.

**Table 9:** Has difficulty retelling what has just been said

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	28	14.0	14.0	14.0
	I partially agree	44	22.0	22.0	36.0
	on the average	52	26.0	26.0	62.0
	I partially disagree	36	18.0	18.0	80.0
	I do not agree at all	40	20.0	20.0	100.0
	Total	200	100.0	100.0	

In the statement in Table 19: "Demonstrates slow and intermittent speech, using many additions (eg, uh, um, and, you know, so)", the results show that 16.5% of professors fully agree, 20 % partially agree, 26.5% are neutral, 19% partially disagree and 18% strongly disagree. From the opinions of the professors in this case, which differ very little in percentage from each other, we conclude that most do not use supplements when speaking, and have a non-slow and uninterrupted speech, which is considered relatively fluent.

**Table 10:** Demonstrates slow and intermittent speech

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	33	16.5	16.5	16.5
	I partially agree	40	20.0	20.0	36.5
	on the average	53	26.5	26.5	63.0
	I partially disagree	38	19.0	19.0	82.0
	I do not agree at all	36	18.0	18.0	100.0
	Total	200	100.0	100.0	

In the statement: "Confuses words that sound similar to others", we see that 14% of professors fully agree with the statement, 24.5% partially agree, 29.5% of them are neutral, 17.5% partially disagree and 14.5% strongly disagree. Thus by analyzing each closed-ended response, most respondents were of the opinion that students confuse words that are similar in sound, which fall to use the same word even though the context varies.

**Table 11:** Confuses words that sound similar

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	28	14.0	14.0	14.0
	I partially agree	49	24.5	24.5	38.5
	on the average	59	29.5	29.5	68.0
	I partially disagree	35	17.5	17.5	85.5
	I do not agree at all	29	14.5	14.5	100.0
	Total	200	100.0	100.0	

The results of the statement "Holds the pencil improperly, resulting in poor writing", show that 12% of professors fully agree, 22.5% partially agree, 16% hold a neutral stance, 24.5% partially disagree and 25% disagree aspak. Thus we understand that in total 34.5% agree, 16% of them are neutral and 49.5% of them disagree, which means that mostly students hold the pencil in the right way and write well.

**Table 12:** Holds the pencil improperly, as a result there is poor writing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	32	16.0	16.0	16.0
	I partially agree	45	22.5	22.5	38.5
	on the average	66	33.0	33.0	71.5
	I partially disagree	33	16.5	16.5	88.0
	I do not agree at all	24	12.0	12.0	100.0
	Total	200	100.0	100.0	

In the statement: "There are difficulties in recognizing and understanding new words", 16% of professors fully agree, 27.5% partially, 27% of them are neutral to the statement, 18.5% partially disagree and 11% do not agree at all. Even according to these results most of the respondents agree with this statement. So in this case the student does not memorize the new words properly.

**Table 13:** There are difficulties in recognizing and understanding new words

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	32	16.0	16.0	16.0
	I partially agree	55	27.5	27.5	43.5
	on the average	54	27.0	27.0	70.5
	I partially disagree	37	18.5	18.5	89.0
	I do not agree at all	22	11.0	11.0	100.0
	Total	200	100.0	100.0	

In the statement: "Often loses place while reading", 14.5% of professors fully agree, 19.5% partially, neutral are 29.5%, 23.5% of professors partially disagree and 13% of them disagree at all. From these percentages we conclude that most students do not miss the decision to read, which makes us realize that they are attentive to reading

**Table 14:** Often loses place while reading

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	29	14.5	14.5	14.5
	I partially agree	39	19.5	19.5	34.0
	on the average	59	29.5	29.5	63.5
	I partially disagree	47	23.5	23.5	87.0
	I do not agree at all	26	13.0	13.0	100.0
	Total	200	100.0	100.0	

In the statement: "Changes the order of the letters in question, for example (give-and-take)", we see that 13% of professors fully agree, 24% partially, 25.5% are neutral, 22% partially disagree and 15.5% disagree aspak. Such results lead us to the conclusion that students show signs of difficulty in reading, although the opinions of the respondents differ very little in the important percentage is that the majority agrees with the statement made. This is a statement that leads me to dyslexia

**Table 15:** Changes the order of the letters in question

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	26	13.0	13.0	13.0
	I partially agree	48	24.0	24.0	37.0
	on the average	51	25.5	25.5	62.5
	I partially disagree	44	22.0	22.0	84.5
	I do not agree at all	31	15.5	15.5	100.0
	Total	200	100.0	100.0	

In the results of the statement: "There are problems in naming letters", we see that 17.5% of respondents fully agree, 17.5% of them partially agree, 25.5% of them are neutral, 22.5% do not partially agree and 17% do not agree at all. The results of this statement let us know that some of the students have such a problem in the opinion of professors always some others do not, where if we get a general answer from all this, then we come to understand that students know phonemes well.

**Table 16:** There are problems in naming the letters

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	35	17.5	17.5	17.5
	I partially agree	35	17.5	17.5	35.0
	on the average	51	25.5	25.5	60.5
	I partially disagree	45	22.5	22.5	83.0
	I do not agree at all	34	17.0	17.0	100.0
	Total	200	100.0	100.0	

From the results of the following table with the statement: "Replace or avoid some words while reading", we see

that 14% of survey participants fully agree, 24.5% partially agree, 24% are neutral, 18.5% partially disagree and 19% do not agree at all. As can be seen from the results, most professors agree with such a statement, which leads us to the conclusion that students try to avoid words they do not understand by replacing them with words that they master well, thus manipulating the text when reading with intended to cover their own weaknesses.

**Table 17:** Substitutes or avoids some words while reading

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	28	14.0	14.0	14.0
	I partially agree	49	24.5	24.5	38.5
	on the average	48	24.0	24.0	62.5
	I partially disagree	37	18.5	18.5	81.0
	I do not agree at all	38	19.0	19.0	100.0
	Total	200	100.0	100.0	

In the statement: "Does not like to read", 14% of professors fully agree, 16.5% of them partially agree, 26% of respondents are neutral, 26% partially disagree and 17.5% strongly disagree. Such results say that respondents are of the opinion that students like to read, especially if there are words in the text that they know, so they oppose such a statement.

**Table 18:** Does not like to read

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	28	14.0	14.0	14.0
	I partially agree	33	16.5	16.5	30.5
	on the average	52	26.0	26.0	56.5
	I partially disagree	52	26.0	26.0	82.5
	I do not agree at all	35	17.5	17.5	100.0
	Total	200	100.0	100.0	

In the statement: "Demonstrates learning delays in copying and writing different texts", we understand that 12.5% of professors fully agree, 21% partially agree, 24.5% are neutral, 24.5% strongly disagree and 17.5% disagree aspak. Such results suggest that most professors are neutral towards this statement, which indicates that students show such a delay but not at a very high level.

**Table 19:** Demonstrates delays in copying and writing different texts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	25	12.5	12.5	12.5
	I partially agree	42	21.0	21.0	33.5
	on the average	49	24.5	24.5	58.0
	I partially disagree	49	24.5	24.5	82.5
	I do not agree at all	35	17.5	17.5	100.0
	Total	200	100.0	100.0	

In the statement of Table 29: "It is difficult to remember what the letters and numbers look like", we notice that 13.5% of professors fully agree, 15.5% partially agree, 28% hold a neutral position, 23% partially disagree and 19.5% do not agree at all. Even against this statement, the attitude of professors is neutral, which shows that the

emergence of such a difficulty can be momentary in students, especially in the first and second grade, so professors are holding such an attitude.

**Table 20:** Hard to remember what letters and numbers look like

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	27	13.5	13.5	13.5
	I partially agree	31	15.5	15.5	29.0
	on the average	56	28.0	28.0	57.0
	I partially disagree	46	23.0	23.0	80.0
	I do not agree at all	39	19.5	19.5	100.0
	Total	200	100.0	100.0	

In the statement: "Often inverts letters, numbers and symbols", we see these results, 12.5% of professors fully agree, 16.5% partially agree, 30.5% are neutral to this statement, 17.5% partially disagree and 23% do not agree at all. From such results we conclude that students do not invert the letters, most of them write correctly and accurately.

**Table 21:** Often inverts letters, numbers, and symbols

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	25	12.5	12.5	12.5
	I partially agree	33	16.5	16.5	29.0
	on the average	61	30.5	30.5	59.5
	I partially disagree	35	17.5	17.5	77.0
	I do not agree at all	46	23.0	23.0	100.0
	Total	200	100.0	100.0	

The results of the statement: "Copies from the table incorrectly (eg, confuses letters and numbers with similar images)", are: 15.5% of professors fully agree, 20.5% of them partially agree, 25.5% have a neutral attitude to this statement, 21% partially disagree and 17.5% strongly disagree. From such results we conclude that most students do not describe correctly from the table due to which there can often be some visual impairment.

**Table 22:** Copies from table incorrectly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	31	15.5	15.5	15.5
	I partially agree	41	20.5	20.5	36.0
	on the average	51	25.5	25.5	61.5
	I partially disagree	42	21.0	21.0	82.5
	I do not agree at all	35	17.5	17.5	100.0
	Total	200	100.0	100.0	

In the table below with the statement: "It is difficult to socialize with peers", we see that 8.5% of professors fully agree, 20.5% of them partially agree, 24% are neutral, 24% partially disagree and 23% do not agree at all.

Thus from such results we conclude that students do not show social difficulties and are sociable with their peers.

**Table 23:** Has difficulty socializing with peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	17	8.5	8.5	8.5
	I partially agree	41	20.5	20.5	29.0
	on the average	48	24.0	24.0	53.0
	I partially disagree	48	24.0	24.0	77.0
	I do not agree at all	46	23.0	23.0	100.0
	Total	200	100.0	100.0	

In the statement: "Does not react properly to harassment", we note that 12% of respondents fully agree, 17.5% of them partially agree, 25.5% are neutral to this statement, 23.% do not partially agree and 21.5% do not agree at all. From such thoughts we conclude that students do not react unwantedly to any bullying, ie students do not show undesirable behavior in the classroom.

**Table 24:** Does not respond properly to bullying

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	24	12.0	12.0	12.0
	I partially agree	35	17.5	17.5	29.5
	on the average	51	25.5	25.5	55.0
	I partially disagree	47	23.5	23.5	78.5
	I do not agree at all	43	21.5	21.5	100.0
	Total	200	100.0	100.0	

In the statement: "There are difficulties with self-control when disappointed", we see that 11% of respondents fully agree, 20% partially agree, 33.5% have a neutral attitude towards the statement, 19.5% partially disagree and 16% of them do not agree at all . Thus we find that most professors have encountered such a difficulty in students and that most of them do not experience disappointment in the best possible way, so they come out of themselves.

**Table 25:**Has difficulty with self-control when disappointed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	22	11.0	11.0	11.0
	I partially agree	40	20.0	20.0	31.0
	on the average	67	33.5	33.5	64.5
	I partially disagree	39	19.5	19.5	84.0
	I do not agree at all	32	16.0	16.0	100.0
	Total	200	100.0	100.0	

In the statement: "Shows difficulties in knowledge of numbers (eg knowing sizes without counting)", we see that 14.5% of professors fully agree, 18% of them partially agree, 33.5% of professors are neutral to the statement, 17.5% partially disagree and 16.5% disagree at all. This is how we understand that in the opinion of professors, mothers show difficulties in mathematics, exactly display discals.

**Table 26:** Shows difficulty in knowledge of numbers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	29	14.5	14.5	14.5
	I partially agree	36	18.0	18.0	32.5
	on the average	67	33.5	33.5	66.0
	I partially disagree	35	17.5	17.5	83.5
	I do not agree at all	33	16.5	16.5	100.0
	Total	200	100.0	100.0	

In the following table which presents the results of the statement: "There is difficulty in learning and memorizing the basic facts of addition and subtraction", we see that 15% of professors participating in the research fully agree, 20% partially agree, 29% are neutral, 24.5% partially disagree and 11.5% disagree at all. From figure 35 of the results we conclude that professors are facing such a difficulty in the students they work with, results that again lead us to the discourse.

**Table 27:** Has difficulty learning addition and subtraction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	30	15.0	15.0	15.0
	I partially agree	40	20.0	20.0	35.0
	on the average	58	29.0	29.0	64.0
	I partially disagree	49	24.5	24.5	88.5
	I do not agree at all	23	11.5	11.5	100.0
	Total	200	100.0	100.0	

In the statement: "Poorly order the numbers resulting in miscalculations", we see that 16% of professors fully agree, 18% of them partially agree, 31% hold a neutral position, 21% partially disagree and 14% of them disagree at all. Thus the table of results shows us that in the opinion of the participating professors, students do not show errors in the ordering of numbers, compared to other mathematical difficulties.

**Table 28:** Poorly order numbers by making computational errors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	32	16.0	16.0	16.0
	I partially agree	36	18.0	18.0	34.0
	on the average	62	31.0	31.0	65.0
	I partially disagree	42	21.0	21.0	86.0
	I do not agree at all	28	14.0	14.0	100.0
	Total	200	100.0	100.0	

In the statement: "There are difficulties with comparisons (eg, less than, greater than)", we see that 16.5% of professors fully agree, 16% partially agree, 29% are neutral, 25% disagree partially and 13% of them do not agree at all. The results show, always based on the opinion of the respondents that students have no difficulty in comparing different numbers or things.

**Table 29:** Has difficulty making comparisons

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	33	16.5	16.5	16.5
	I partially agree	32	16.0	16.0	32.5
	on the average	58	29.0	29.0	61.5
	I partially disagree	51	25.5	25.5	87.0
	I do not agree at all	26	13.0	13.0	100.0
	Total	200	100.0	100.0	

In the statement: "There are difficulties with the concept of passage of time", 16% of respondents fully agree, 13.5% partially agree, 29.5% are neutral to the statement, 23.5% partially disagree and 17.5% strongly disagree. According to the figure of the results, we conclude that the students do not have this difficulty, so they have formed within themselves the concept of time.

**Table 30:** There are difficulties on the concept of time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	32	16.0	16.0	16.0
	I partially agree	27	13.5	13.5	29.5
	on the average	59	29.5	29.5	59.0
	I partially disagree	47	23.5	23.5	82.5
	I do not agree at all	35	17.5	17.5	100.0
	Total	200	100.0	100.0	

In the statement: "It is difficult to count quickly or do the calculations", we see that 14.5% of professors completely agree, 16.5% of them partially agree, 29.5% are neutral, 28% do not partially agree and 11.5% do not agree at all. From the table of results we notice that the opinions of professors do not show such a difficulty in mothers.

In the statement: "There are problems in learning multiplication tables, formulas and rules", 17.5% of respondents fully agree, 18% partially agree, 33% are neutral, 19% partially disagree and 12.5% strongly disagree. According to the above-mentioned results, we conclude that professors consider the learning of the multiplication table by students as problematic, a problem which also results in other mathematical errors.

**Table 31:** Has difficulty counting quickly or doing calculations

		Frequency	Percent	Valid Percent	Cumulative Percent
	I completely agree	29	14.5	14.5	14.5
	I partially agree	33	16.5	16.5	31.0
	on the average	59	29.5	29.5	60.5
	I partially disagree	56	28.0	28.0	88.5
	I do not agree at all	23	11.5	11.5	100.0
	Total	200	100.0	100.0	

**Table 32:** There are difficulties in learning multiplication tables

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	35	17.5	17.5	17.5
	I partially agree	36	18.0	18.0	35.5
	on the average	66	33.0	33.0	68.5
	I partially disagree	38	19.0	19.0	87.5
	I do not agree at all	25	12.5	12.5	100.0
	Total	200	100.0	100.0	

In the statement: "Students are easily identified with learning difficulties", 18.5% of professors fully agree, 23.5% of them partially agree, 25% are neutral, 24% of them strongly disagree and 9% do not agree at all. Thus we come to understand that professors do not find it difficult to identify any of the learning difficulties, if students show any of their signs. All this has been achieved because now professors have faster and easier opportunities to get information and professional development. The least they can do is instruct these students to the professional in the field.

**Table 33:** Students are easily identified with learning difficulties

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	37	18.5	18.5	18.5
	I partially agree	47	23.5	23.5	42.0
	on the average	50	25.0	25.0	67.0
	I partially disagree	48	24.0	24.0	91.0
	I do not agree at all	18	9.0	9.0	100.0
	Total	200	100.0	100.0	

In the statement: "Learning difficulties are innate", 21% of professors fully agree, another 20.5% partially agree, 33% neutral, 15% partially disagree and strongly disagree are 10.5% of them. Based on all this we conclude that most of the opinions of professors consider that these difficulties are innate. Opinion which is also related to many of the results of scientific research, which have reached the same conclusion.

**Table 34:** Learning difficulties are innate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I completely agree	42	21.0	21.0	21.0
	I partially agree	41	20.5	20.5	41.5
	on the average	66	33.0	33.0	74.5
	I partially disagree	30	15.0	15.0	89.5
	I do not agree at all	21	10.5	10.5	100.0
	Total	200	100.0	100.0	

Based on the research results we understand that students have difficulty in organizing university activities, and we can also say that there is a slight distraction from external influences. Also worrying is the fact that they quickly forget about daily / routine activities and have a considerable level of awkwardness. Professors say that students do not succeed with games and activities that require hand-eye coordination, or even have trouble pressing buttons, performing various activities with hooks, clasps, chains, and failing to tie shoes, activities

these that inform us of the improper coordination of movements. But the difficulties do not stop here, they also fail to keep the pencil in proper shape, thus resulting in poor writing, have difficulty even in the use of small objects or objects that require accuracy, also demonstrate speech delays and have difficulty retell what has just been said. The level of percentages in some cases is not very high, but approximately over 30-40% represent such levels of problems which is very significant for society and for the further development of students, so great care should be taken and access should be provided. more professional.

**Table 41:** Analysis on the occurrence of dyspraxia in students

	Strongly Agree		Partially Agree		Neutral		Moderately Disagree		Partially Disagree	
	N	%	N	%	N	%	N	%	N	%
There are difficulties in organizing activities	26	13.0%	56	28.0%	56	28.0%	37	18.5%	25	12.5%
Easily distracted by external influences.	33	16.5%	54	27.0%	57	28.5%	36	18.0%	20	10.0%
Quickly forgets daily / routine activities.	25	12.5%	47	23.5%	63	31.5%	38	19.0%	27	13.5%
He is clumsy, spills and drops things from his hands.	23	11.5%	29	14.5%	57	28.5%	49	24.5%	42	21.0%
There is no success with games and activities that require hand-eye coordination (e.g., piano lessons, basketball, baseball).	14	7.0%	39	19.5%	47	23.5%	54	27.0%	46	23.0%
Has problems with pushing buttons, performing various activities with hooks, clasps, chains and fails to make shoe laces.	19	9.5%	29	14.5%	53	26.5%	48	24.0%	51	25.5%
Holds the pencil improperly, resulting in poor writing.	24	12.0%	45	22.5%	32	16.0%	49	24.5%	50	25.0%
Has difficulty using small objects or items that require precision (e.g., lego, puzzle, tweezers, and scissors).	26	13.0%	34	17.0%	55	27.5%	42	21.0%	43	21.5%
Demonstrates speech delays.	24	12.0%	42	21.0%	59	29.5%	31	15.5%	44	22.0%
It is difficult to retell what has just been said.	28	14.0%	44	22.0%	52	26.0%	36	18.0%	40	20.0%

Verification of hypothesis

To prove the first hypothesis which says: "Learning difficulties are very common in university students", the Hi2 test was applied, where the independent variable is the gender of professors, while the dependent variable is the statement: "I think that learning difficulties are very common in our universities." According to the

following results, we see that most professors fully agree with such a phenomenon in universities, a result that confirms the research hypothesis.

**Tabel 42:** Test of Pearson Chi-Square

Chi-Square Tests				
		Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square		1.656 <sup>a</sup>	4	0.799
Likelihood Ratio	1.571	4		0.814
Linear-by-Linear Association	0.380	1		0.538
N of Valid Cases	200			

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.25.

Testing of the second hypothesis

To confirm the second hypothesis: "Professors do not have sufficient professional training to properly address these difficulties" the correlation test was used, where the independent variable is the qualification of professors, while the dependent variable is the average of questions (Question 37, Question 38, Question 39, Question 41, Question 42) which represent the average of learning difficulties.

**Table 43:** Correlation test for the second hypothesis

Correlations			
		Education Level	Learning difficulties
School Level	Pearson Correlation	1	0.058
	Sig. (2-tailed)		0.417
	N		200
Learning difficulties	Pearson Correlation		1
	Sig. (2-tailed)		
	N		

Testing of the third hypothesis

In this case we have the research question: Which of the learning difficulties are most often shown to students? which corresponds to the third hypothesis

H3 - Dyslexia and dysgraphia are the most common difficulties in students.

To test which of these difficulties is most commonly seen in elementary university students, the KMO test and the barlet test were applied to test the margin of error. Then we applied the classification of variables, where the results showed that there are 6 categories of learning difficulties.

As we can see from table 56, the KMO test and the Bartlett test prove that the data are acceptable, where KMO = 0.944, chi-square = 6,210.962, with degree of freedom = 666, and p-value = 0.000 which is significant at 0.01 of the error margin.

**Table 44:** KMO test for the third hypothesis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.944
Bartlett's Test of Sphericity	Approx. Chi-Square	6,210.962
	Df	666
	Sig.	0.000

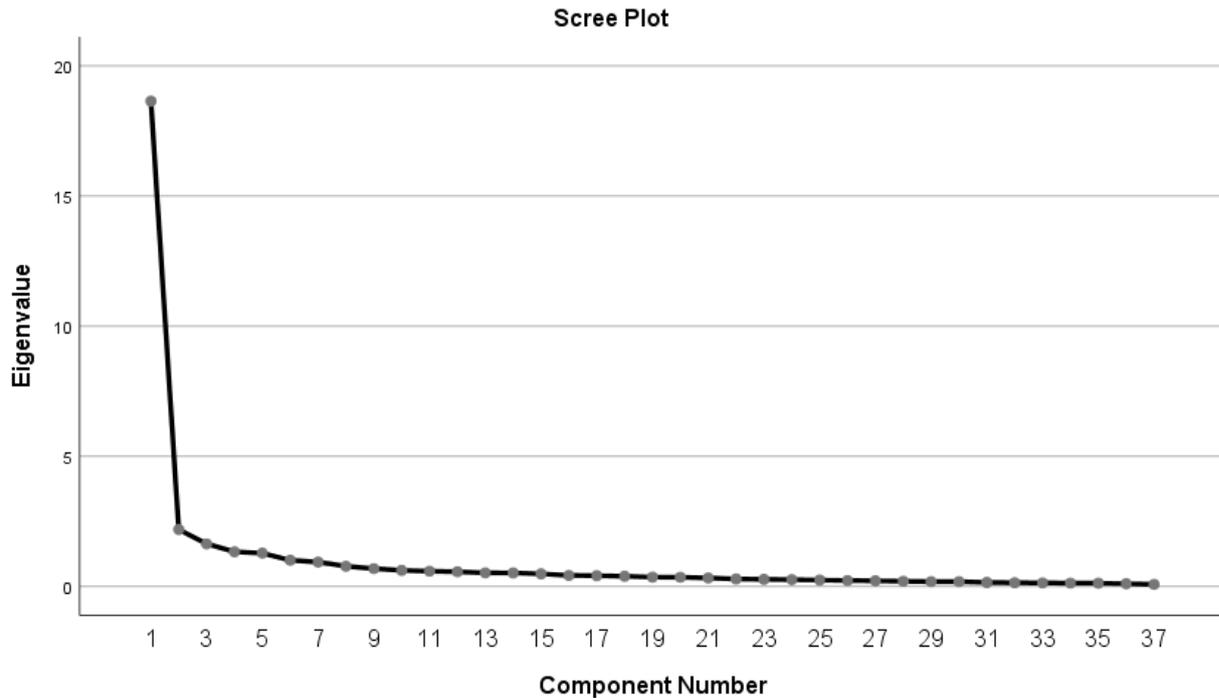
Based on Table 57, we see that the variables are classified into 6 categories indicating that we have more than two factors that are prevalent in students as learning difficulties.

**Table 45:** Classification of variables

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% Variance	ofCumulative %	Total	% Variance	ofCumulative %	Total	% Variance	of Cumulative %
1	18.644	50.388	50.388	18.644	50.388	50.388	6.822	18.437	18.437
2	2.187	5.912	56.301	2.187	5.912	56.301	5.460	14.756	33.192
3	1.634	4.416	60.716	1.634	4.416	60.716	5.295	14.310	47.503
4	1.333	3.602	64.318	1.333	3.602	64.318	3.201	8.652	56.155
5	1.279	3.456	67.774	1.279	3.456	67.774	2.823	7.630	63.785
6	1.006	2.720	70.494	1.006	2.720	70.494	2.482	6.709	70.494
7	0.938	2.535	73.029						
8	0.775	2.094	75.123						
9	0.685	1.851	76.973						
10	0.617	1.669	78.642						
11	0.587	1.586	80.228						
12	0.563	1.522	81.750						
13	0.524	1.416	83.166						
14	0.520	1.405	84.570						
15	0.485	1.310	85.880						
16	0.424	1.145	87.025						
17	0.413	1.116	88.141						
18	0.393	1.061	89.203						
19	0.358	0.967	90.170						
20	0.352	0.951	91.121						
21	0.326	0.881	92.002						
22	0.287	0.776	92.778						
23	0.273	0.738	93.515						
24	0.263	0.711	94.226						
25	0.245	0.663	94.889						
26	0.228	0.617	95.506						
27	0.218	0.588	96.094						
28	0.201	0.542	96.637						
29	0.186	0.503	97.139						
30	0.184	0.497	97.636						
31	0.154	0.417	98.053						
32	0.144	0.390	98.443						
33	0.137	0.371	98.813						
34	0.130	0.352	99.165						
35	0.126	0.341	99.506						
36	0.104	0.280	99.786						
37	0.079	0.214	100.000						

Extraction Method: Principal Component Analysis.



**Figure 46:** Curve of variables

This figure shows the decline from variable 6 which proves that we will have 6 factors. The first category includes variables: has problems naming letters (0.727), has difficulty remembering what letters and numbers look like (0.766), and often inverts letters, numbers, and symbols (0.741), which can lead to dyslexia.

The second category includes variables: shows difficulty in knowing numbers (e.g. knowing quantities without counting (0.654), and has difficulty with comparisons (e.g. less than, greater than) (0.776), which suggests the presence of dyscalculia.

The third category includes variables: there is no success with games and activities that require hand-eye coordination (e.g., piano lessons, basketball, baseball) (0.727), there are problems with pressing buttons, in performing activities various with hooks, clasps, chains and fails to make shoe laces (0.803), holds the pencil improperly, resulting in poor writing (0.770) and has difficulty using small objects or items that require precision (e.g., Lego, puzzle, tweezers, scissors) (0.697), which is otherwise referred to as difficulty in activities related to fine motor skills. In the fourth category are the variables: students are easily identified with learning difficulties (0.718), learning difficulties are innate (0.749) and teachers' engagement alleviates learning difficulties in students (0.707) which shows the professionalism of teachers in this case as well as the knowledge they have regarding these difficulties. In the fifth category are variables such as: has limited interest in books or stories (0.617) and has difficulty understanding task instructions (0.675), which indicates disorder in understanding things.

In the sixth category are the variables: there is difficulty in organizing activities (0.711) and it is easily distracted by external influences (0.833), which can be termed as attention disorder.

#### **4. Conclusion and Discussion**

The purpose of this research was to highlight the extent to which learning difficulties have taken on university students, as well as the impact that such difficulties have on their academic performance. In addition, this research in itself combines two other goals, one is related to professors' knowledge of these difficulties, while the other is related to the prevalence of learning difficulties. The results showed that the prevalence of learning difficulties in students is quite high in the opinion of professors, also these difficulties are closely related to students' academic performance, not allowing them to catch up with typical students. So the first hypothesis has been proven, thus giving a positive direction to the research question that learning difficulties are quite present in students. Another finding of this research is that, unlike previous years, professors have expressed knowledge about these difficulties, and with what they know are able to provide students with a genuine treatment within their class, a finding that rejects the second hypothesis, and gives a positive answer to the second research question of this paper. Another result that has also been studied is that dyslexia and dysgraphia are more evident in students, but also difficulties in mathematics and difficulties in manipulating movements are not left behind, thus adding both emotional and attention disorders. To the research question on dyslexia and dysgraphia, as one of the most common difficulties, we find positive answers, but we also add the presence of dyscalculia and dyspraxia.

The research was conducted in 15 universities in the Kosovo, 6 of the universities are located in rural areas of the Prishtina region, and 9 of them are located in urban areas. The selection of universities was made based on the largest number of working professors, thus meeting the research requirement with 200 participating respondents. Of these, 137 were working in urban universities and 63 in rural universities. The results of this research are in the same direction with some of the researched studies, where according to [18] in Albania there is a very high number of students with learning difficulties, who experience a lot of pressure from parents and society, which affects their academic performance within the classroom, and their emotional state is not to be desired. On the other hand also [39] found that students with learning difficulties who received an early intervention, mitigated the signs of that difficulty and managed to succeed in university and in life.

The other result in which professors say they have knowledge of learning difficulties coincides with the findings of an international study conducted in the US by [35] which states that there has recently been a greater awareness of the population regarding with these "problems", because nowadays we have many and fast ways of obtaining information, so all this has affected 2.7 million students to receive proper support and treatment. Also, the results of [10] showed that: "In our schools, respectively in the category of primary school students, there is a considerable number with difficulties in reading and writing", a result which coincides with previous studies, adding that dyscalculia and dyspraxia have a significant prevalence of occurrence in primary school students.

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