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LEARNING DIFFICULTIES AND ADDICTION ON THE INTERNET: THE CASE OF A STUDENT WITH ADHD IN JUNIOR HIGH SCHOOL

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Abstract

The paper studies the bibliography of the specific reading difficulties in language courses and behavioral problems, with an emphasis on internet reliance in a case study of student in junior high school, who has diagnosed with Attention Deficit Disorder with or without Hyperactivity Disorder (ADHD). The "addiction" is recorded with excessive use of computer, neglect of individual study of lessons, school sub-performances, and inter-family conflicts. The assumptions investigated whether the philologist, who in our case is the sister of the student, is able to understand the difficulties in perceptual reading and dependency problems. It has also been investigated whether she can interfere with the Targeted Individual Structured and Integrated Program for Students with Special Educational needs (TISIPFSEN) by reading texts through the mobile phone. The results showed that the philologist could understand the reading difficulties. Finally, it showed that she could intervene by turning the negative uses of the internet into positive ones, making the mobile an auxiliary pedagogical teaching tool to a certain language course.

Keywords: ADHD, TISIPFSEN, Perceptual Reading, Internet Addiction

1. Introduction

The Attention Deficit Disorder with or without Hyperactivity Disorder (ADHD) is one of the first things that the teachers as the philologists suspect when a child's behaviour in class or performance on schoolwork is deviant. Associated features supporting diagnosis are mild delays in language, motor, or social development, which may include low frustration tolerance, irritability, or mood ability. Even in the absence of a specific learning disorder, academic or work performance is often impaired. Inattentive behavior is associated with various underlying cognitive processes, and individuals with ADHD may exhibit cognitive problems on tests of attention, executive function, or memory, although these tests are not sufficiently sensitive or specific to serve as diagnostic indices. By early adulthood, ADHD is associated with an increased risk of suicide attempt, primarily when comorbid with mood, conduct, or substance use disorders (Clarke *et al.* 2001).

These findings raised the question of how reading difficulties affect the performance of students with Attention Deficit Disorder with or without Hyperactivity Disorder (ADHD) with emphasis to the Didactic Interactions in language courses. The taxonomic system (American Psychiatric Association, 2013), the educational definitions of the learning difficulties of children with ADHD, the perceptual and petrified-spanking reading are based on Tomatis' theory (Tomatis, 2005). The Tomatis method is a natural approach to neuro-sensory stimulation. The listening programs change the music and voice in real time in order to capture the brain's attention and to develop motor, emotional and cognitive skills. Also helps the sub-performances not only in literary lessons but also in behavior. In our study of a particular student we are recorded with other-observations and self-observations with an emphasis on Greek reality and the assessment of junior high school students.

To our knowledge, the methodology of special education and training, in accordance with the observation methodology (Strogilos and Avramidis, 2017) and the methodology of teaching interventions with the targeted, individual, structured teaching and integration program of special education and training with the pedagogical tool (TISIPFSEN) (Drossinou-Korea and Periferakis, 2018). The philologist's other-observations and self-observations (Christakis, 2011) focus on the specific learning difficulties (SLDs) arising from Attention Deficit Disorder with or without Hyperactivity Disorder (ADHD) and the emotions. The experiences from using the individual tools of the first and second phase of TISIPFSEN helped the sister of a student with ADHD, to understand the problem of reading difficulties and behavioral underperformance, with emphasis on Internet addiction (ADHD-Europe, 2019) by intervening in language lessons.

The results by examining whether the hypotheses we have formulated in the methodology are fully verifiable or not verified. The first study on the specific learning difficulties arising from ADHD is confirmed according to definitions from the bibliographic documentation and the data from the observation methodology of a student with an ADHD diagnosis, based on the records in the excel tables of the informal pedagogical assessment (IPA). The second investigation regarding the linguistic interventions of a philologist with a certain teaching goal, which is confirmed by the differentiations, which applies in the fourth phase with the booklet and the mobile phone, as well as their evaluation in the fifth phase of TISIPFSEN.

The paper is organized as follows: Section 2 points out the clarification of terms about ADHD. For example, how reading difficulties in high school are affected by addiction of the smart mobile games, inter-family relationships and communication. With respect to the Tomatis method (Tomatis, 1972) section 3 introduces the methodology of observing special educational needs, using the pedagogical tool of TISIPFSEN. Based on the Targeted Individual Structured Teaching Accession Program for Special Education and Training, observations and good pedagogical practical interventions are recorded. Section 4 introduces the teaching results of our study. Section 5 concludes and proposes making the mobile phone a means of addiction, a useful educational teaching and learning tool, despite our initial fears and hesitations about our cooperation with a student with ADHD.

2. Clarification of Terms

2.1. Reading Difficulties in High School

The Specific learning difficulties (SLDs) include reading difficulties in high school and are highly comorbid conditions with ADHD and Dyslexia (British Dyslexia Association, 2018; Gibson and Kendall, 2010; Critchley, 1981) is known as the SLDs, which consist of the student's language impairment in reading, writing and spelling. Reading with the alphabetical writing system requires the student to be aware of the phonological structure of speech, also known as the acquisition of the alphabetical principle. The alphabetical code implies increased leeway and comfort in word recognition and spelling, namely alphabetical and spelling knowledge. Moreover, the reading factor of the student with ADHD differs qualitatively and quantitatively from that of the normal reader, as well as the factor of the reading-spelling delay, which is not always part of a generalized learning delay with regard to perceptual difficulties and mental difficulties (Porpodas, 1981). Most pupils with SLDs encounter difficulties in short-term memory.

They also have difficulties in retrieving past information, knowledge, experience, and correlating them with the information being processed.

Reading difficulties in ADHD students refer to a problem in central processing, where superior cognitive functions (thinking, judgment, reasoning, etc.) are encountered, where the classification and organization of information is presented as yet another problem. All of the above are prerequisites, which all students involved in education, children and young people with Special Educational Needs (SEN) (Fox and Avramidis, 2003).

2.2. Attention Deficit Disorder with or without Hyperactivity Disorder (ADHD)

The Attention Deficit Hyperactivity Disorder (ADHD) is one of the most common behavioral disorders and the most common neuro-developmental disorder of childhood and adolescence. According to the DSM-V (American Psychiatric Association, 2013), the syndrome is now referred to as "Attention Deficit / Hyperactivity Disorder", while three sub types can be distinguished: a) ADHD, Combined Type, b) ADHD with Forerunner, c) ADHD with Pre- Hyperkinetic-Compressive Type.

Based on ICD-10, in which ADHD appears to be a hyperactivity disorder, it occurs at an early age (within the first 5 years) and presents, in addition to the features already mentioned, a lack of persistence mainly in activities requiring cognitive entanglement, continuity of activity rotation, before their completion, and inability to manage behavior (Christakis, 2011).

2.3. Addiction of the smart mobile games

The internet is now the necessary tool for information, social contact and entertainment for teenagers. However, excessive engagement with this medium creates risks of developing extreme behaviors about its use. The initial symptoms of "addiction" are excessive computer time, neglect of obligations and a sharp drop in school performance. Isolation, a reduction in the time and activities of children with their family and friends, behavioral changes such as violent behavior in the home, indifference to things they once thanked, and delinquency often make up the overall picture (Kyriacou *et al.* 2013; Christakis, 2012).

Children learn, among the other learning processes of classical learning and learning deviant behaviors. Leisure and tackling the problems resulting from the lack of employment institutionalize the "regime", which is equipped and legalized with new "consumables", such as video games and electronically personal games. The violence with which video game software is invested teaches children to the phenomenon of violence and cultivates violent behavior through the free time they spend on playing. There are, of course, physical symptoms such as headache, eye dryness, eating deviations and neglect of physical hygiene and caring for their selves.

2.4. Inter-family Relationships and Communication

The intra-family relationships, especially brother-to-peer communication, when one is suffering from ADHD is extremely burdensome. Because of Internet addiction, intense fighting, manipulations and conflicts occur (Kauffman, 2001). Any improvement in his behavior, such as becoming more debatable, talkative, social, and expressive, requires him to understand his reading difficulties and to gradually learn to spend less time with the computer and to make more friends with his peer. In our case, where the sister has undertaken to support him with special lessons in philological lessons and to prepare him for the Junior High School, it was considered necessary to thoroughly examine the teacher with her pupil-brother.

3. The Special Education Methodology

The observation methodology refers to the collection of qualitative data with informal pedagogical evaluation of behaviors, situations, physical characteristics of the student with

ADHD (American Psychiatric Association, 2013; Strogilos and Avramidis, 2017). In addition, it is recorded with non-verbal forms of communication and teaching interactions.

3.1. Study Feasibility

The purpose of this study is to understand the problem of reading difficulties by teaching language interactions in a case study of a 15-year-old boy at the Junior High School with diagnosis as ADHD from the medical-pedagogical center.

3.2. Research Issues-Subjects

In the individual research questions, the following hypotheses are considered, about the relationship of the philologist with the ADHD, and the addiction on online mobile games.

H₁: The philologist can understand the relationship between specific reading difficulties and ADHD, according the perceptual reading (Bonthuys et al. 2018) and surface reading. Also, he will be able to make a positive contribution to controlling behavioral problems from online addiction.

H₂: The philologist can intervene in language skills and behavioral problems due to mobile phone games addictions on a 2nd high school student with ADHD.

3.3. Research Tools - Process

The research process requires interdisciplinary collaboration between specialists, parents and teachers and is based on the methodology of observing special educational needs, using the pedagogical tool of TISIPFSEN. Based on the Targeted Individual Structured Teaching Accession Program for Special Education and Training, observations and good pedagogical practical interventions are recorded. Multi-sensory support of teaching, with the creation of cognitive machines, with three-dimensional pedagogical material with fixed and mobile cards in binders and a variety of teaching tools, with visual conceptual facilitators, supports textual comprehension. In addition, new technologies, in particular computers and mobile phones, can be used to build the curriculum of the curriculum in TISIPFSEN (Drossinou-Korea, 2017).

In order to better implement the research process and the course with differentiated language interventions tailored to the specific educational needs of ADHD, we divide the teaching objective into small teaching steps accompanied by corresponding textual activities so that the student keeps his attention better. Also, the environment of the research process is required to be quiet without sustained stimulation stimuli to avoid distraction. Moreover, we have organized our work individually T (I) SIPFSEN, controlling the interference from others. Finally, the research process utilized the interaction with the computer - mobile with an invitation to respond online in linguistic exercises taking some visual and acoustic stimulus.

3.3.1. First tool TISIPFSEN: Individual systematic and empirical observation of a student with ADHD

The observation methodology is carried out in a case study of Paraskevas, who is a student with ADHD. With the first tool TISIPFSEN we have used the protocols of the Informal pedagogical assessment (IPA). In the school history, it is recorded through the systematic empirical hetero-observations that the student attends the first semester of the third grade of Junior High School, with a base line in the 19th semester of formal and compulsory education. He has gaps in literary lessons and has difficulty concentrating for a certain amount of time. His teachers help him with the grades to pass the class, since he is generally quiet in the lesson and does not bother the other children. He still has a great difficulty in producing and understanding writing, he does not understand even the simple mathematical acts and he cannot be conscious. In the spoken word, he does not have a particular problem, it just takes more time to answer and as it snaps, it gives the impression that it does not know the answer. It

is not easy to interact with other children, as Paraskevas is quite, closed and shy and on the other hand, due to his impulsivity and his inability to follow rules, his classmates do not want to participate in group games often. This has the consequence of having few friends. At home, he interacts with his eight-year-old sister, with whom he is doing well enough, though there are several conflicts between them over time, because Paraskevas has chosen to attract her attention.

3.3.2. Second tool- (first part)-TI (S-I-P) FSEN: Performance and Informal pedagogical assessment of specific reading difficulties

The Informal pedagogical assessment (IPA) is the second tool we use in the second phase of TISIPFSEN using the Basic Skills Control Lists (BSCL) to understand the specific reading difficulties. Cross-references are recorded as factors involved in the informal pedagogical assessment (IPA), focusing on what the student does with ADHD, emphasizing the concentration and consistency of his work at a certain time.

School performance is "bad", school failures accumulate and its self-esteem is low and tends to resign, especially when it cannot solve an exercise immediately. In the classroom, he does not advance to make his exercises while copying from the board and makes several mistakes, as he is lost and confused. When he wants to write a text, he makes too many misspellings, and he can help with organizing his ideas and finding the right words.

3.3.3. Second Tool- (second part) -TI (S-I-P) FSEN: Informal pedagogical evaluation of behavior problems (hetero-observations)

The Informal Pedagogical Assessment (IPA) is recording the student's skill level in the various problem areas such as behavior. Deviations are recorded in the semesters of the class attended and monitored by the weekly timetable. Paraskevas is in the 19th semester of formal and compulsory education, which is the base line and marked with a horizontal yellow line. These BSCL include skills from the neuro-developmental areas of learning readiness (1), special educational needs as (2), skills from the cognitive domains defined by the Interdisciplinary Framework of Analytical Curriculum of Special Education (Avramidis *et al.* 2010) and skills of Curriculums in Language Courses on General Learning Difficulties (3) and skills from areas of perception, memory, graphic space, reading, mathematics, behavior, as defined in the Experimental Program of Specific Learning Difficulties (4) (Markakis and Drossinou - Korea, 2000). These include the problems of offending behavior (Paraskevopoylos and Hervet, 2013).

Children with ADHD may have evidence of abusive behavior because they have difficulty understanding and following the rules governing the learning environment. Internet addition on Paraskevas' behavior is described as delinquent because he is unable to follow social rules, has difficulty creating and maintaining good interpersonal relationships with his peers and teachers.

3.3.4. Second tool - (third part) -TI (S-I-P) FS (E) N: Informal pedagogical assessment of behavioral problems (self-observations of the philologist)

The self-observations refer to the interpersonal relationship the teacher develops with the learner and the emotions that are born to him by the interaction with him, and he is part of the IPA of the behavioral problems. In this context, the philologist's feelings and thoughts regarding the initial informal pedagogical assessment (Table 1) are recorded from the learner's or student's response to the goals, examining their functionality and correspondence with their pupil's abilities and promoting school performance. As regards our self-observation of reading difficulties in a particular lesson, we examined the interaction developed between the philosopher-sister and the pupil, who played an essential role in shaping relationships, feedback, updating the individualized curriculum, and increasing of the effectiveness of the intervention.

It is noted that the teacher is often asked without self-observation and pedagogical reflection to set a teaching priority on what happens to the student "here and now". Because teaching support at school is considered as an urgent priority for restoring quietness in the school community, without however interfering with the child's attitudes within the school for at least six weeks.

3.3.5. Third Tool: Targeted individual teaching differentiated integration interventions in Greek language courses

The TISIPFSEN in the fourth phase diversified educational teaching intervention of a student with ADHD in Education. Thus, the teaching priorities are defined in the special pedagogical interventions in Paraskevas, having preceded the systematic empirical and participatory observation, as well as the in IPA.

The differentiated teaching objectives, differentiated pedagogical materials, and educational tools highlight inventive cognitive machines, which are part of the didactic intervention. Visual conceptual facilitators are defined in texts with specific content, mainly by assessing the child's or young person's experiences with a predetermined number and type of words (Avramidis and Norwich, 2015).

The collaboration record with the parent is included in the fifth phase of the TISIPFSEN and forms part of the teaching intervention. This is the task of reading and understanding the emotional code governing inter-family relationships, as they are displayed by the child in the teacher-student interaction.

The methodology of teaching intervention refers to the preparation of ADHD interventions with emphasis on its de-categorization and decriminalization in order to construct an individualized curriculum that addresses its particular difficulties and needs and takes into account the learning readiness, capabilities and interests such as our mobile phone and online warrior games. The diversified teaching objective (short-term) for Paraskevas focused on learning to gather for 15 minutes, read (perceptual reading), to understand 11 lines, approximately 100 words, of a certain phonological type with C=consonant, V=vowel of CVCCVCV (culture) 8 optical facilitators and apply the grammatical rules of the module, using the mobile phone. From the teacher, the timetable of the intervention was decided with the fragmentation of the teaching objective (short-term) according to the third phase of the TISIPFSEN in five steps, differentiating the particular lesson of the first module of the Modern Greek Language, using the dossier as an auxiliary mobile phone tool for the grammar rules of the module.

The success criteria noted that it was intended to be able to understand the text with the help of visual facilitators and solve at least 3 of the 6 didactic interventions. The pay was defined as a verbal saying "Well done!" and as a practice where he can use his favorite subject, the mobile as a teaching and once he has finished reading, he will be able to play his favorite game online for a certain time. Paraskeva's expected behavior regarding perceptual reading (1) was to be able to concentrate for 5-15 minutes, to understand the content of the text, and to be able to solve grammar exercises. With regard to the pet-reader-internet addict (2), he reads his lessons before dealing with the internet and uses the mobile as a learning aid other than by means of entertainment.

The (T) ISIPFSEN and targeted teaching priorities are tailored to Paraskevas. So, the differentiated teaching objective (short-term) has collected data for 15 minutes from the read (perceptual reading). In this exercise, Paraskevas try to understand the text. The extend of text was 11 lines, approximately 100 words, of a certain phonological type of CVCCVCV. For the words, we use 5-8 visual meaning facilitators. Finally, we help him to apply the grammatical rules, using the mobile phone.

The differentiated pedagogical material, the teaching steps and timetable of Interventions, the exercise type with the reading speed exercises, reading, understanding, identifying, word and image sequence writing, writing are presented below with the Folder Steps and the Mobile Phone Steps:

Folder Step 1: Collect within 10 minutes, reading up to 11 lines and 100 words, of a certain phonological type of CVCCVCV (culture), with the help of 5-8 visual conceptual facilitators, showing each word that reads by hand(exercise of reading and linguistic understanding).

Folder Step 2: Collect in under 10 minutes the underlined words in text up to 11 lines and 100 words of a certain phonological type of CVCCVCV (culture), with the help of 5-8 visual conceptual facilitators and find the images that describe them, (exercise of comprehension and image-word identification exercise).

Folder Step 3: Collect within 5 minutes to find the words starting with "c" in text up to 11 lines and 100 words, of a certain phonological type of CVCCVCV (culture), with the aid of 5-8 optical conceptual facilitators,(exercise of reading, linguistic understanding and writing).

Folder Step 4: To gather in about 5 minutes to find the key words in up to 11 lines and 100 words of a certain phonological type, CVCCVCV (culture), with the help of 5-8 visual conceptual facilitators(exercise of reading, linguistic understanding and writing).

Folder Step 5: To concentrate in about 10 minutes, to say in a few words the meaning of text up to 11 lines and 100 words, of a certain phonological type of CVCCVCV (culture), with the help of 5-8 visual conceptual facilitators(exercise of reading and understanding).

Folder Step 6: Collect in another 5 minutes, to write another title for up to 11 lines and 100 words, of a certain phonological type of CVCCVCV (culture), with the help of 5-8 optical conceptual facilitators(exercise of reading, writing and sequencing).

Mobile Phone Step 1: To concentrate in about 5 minutes to break down sentences in the first paragraph of text up to 11 lines and 100 words of a certain phonological type of CVCCVCV (culture), with the help of 5-8 visual conceptual facilitators (exercise of reading, writing and sequencing).

Mobile Phone Step 2: To concentrate in about 5 minutes, to make the editorial analysis, to find the subject, verb and subject of each sentence of the first paragraph up to 11 lines and 100 words, of a certain phonological type of CVCCVCV (culture), with the help with 5-8 visual conceptual facilitators(exercise of reading, writing and sequencing).

Mobile Phone Step 3: Collect in about 5 minutes to find out how the sentences are linked in the cases given (exercise of reading, writing and sequencing).

Mobile Phone Step 4: Collect in about 5 minutes to fill in the gaps with the required connection methods (exercise of reading, writing and sequencing).

Mobile Phone Step 5: Collect in about 10 minutes, write the continuity of sentences given, selecting the appropriate sentence from the box, making sure to use the correct link so that the proposals are joined in the way indicated in the brackets(exercise of reading, writing and sequencing).

4. Results

The teaching interactions in language courses have demonstrated that the philologist can understand and intervene in the reading difficulties of students with Attention Deficit Disorder with or without Hyperactivity Disorder (ADHD), according to the definitions and bibliographic documentation given for perceptual reading (Avramidis and Norwich, 2015), the reading (Bonthuys *et al.* 2018) and the addiction with the Internet games.

4.1. The philologist can understand the relationship of reading difficulties to a student with Attention Deficit Disorder with or without hyperactivity (ADHD) at high school

The teaching intervention was collected along the way, focusing mainly on the recording of the students' ADHD skills in tables in three times. The first is marked in blue on the date 19/09/2018, the second the intermediate in green on the dates between 07/10/2018 -11/10/2018 and the third on the date 17/10/2018. The teaching priority is defined by the neuro-developmental area of the emotional organization with an emphasis on learning interest because it differs greatly from the baseline. The special educational needs with the IPA and BSCL specified according to the Specific Education Curriculum Framework for a student with

ADHD in accordance with the second phase of the TISIPFSEN. The teaching priority is defined as the area of basic academic skills with an emphasis on understanding because it differs greatly from the baseline. Table 1 shows the general (Drossinou-Korea, 2017) learning difficulties of the student with ADHD, the IPA with the BSCL according to the cross curriculum and the analytical curriculum in the language skills of the class. The teaching priority is defined by the area of language skills with an emphasis on comprehension, because it has a ten-month deviation from the baseline.

Table 1. Informal Pedagogical Assessment (IPA) and teaching intervention of the students' ADHD skills

The areas of observations and the Basic Skills Control Lists (BSCL)	Average of semesters	Teaching priorities and skills
Neuro-developmental areas of learning readiness (1),	15/19	Emotional organization
Special educational needs (2), as defined by the Interdisciplinary Framework of Analytical Curriculum of Special Education	14/19	Cognitive domain
General Learning Difficulties (3) as defined by the high school Curriculums	13/19	Language Courses
Specific Learning Difficulties (4)	12/19	Perception, memory, graphic space, reading, mathematics, behavior,

The teaching priority is defined by the IPA of SPLDs, the area of behavioral skills with an emphasis on reading self-image because it differs greatly from the baseline and seeks the appropriate differentiated teaching target (Markakis and Drossinou-Korea, 2000). It is measured by 12, 13 and 14 semesters of formal and compulsory attendance ranging from the second semester of the fifth semester to the second semester of the sixth grade while Paraskevas is in the first semester of the third high school. These fluctuations in the formative highlight the reasons that have led Paraskevas to online games five hours a day at least to be consoled by the accumulated school failure and reader's low self-esteem that has developed.

4.2. The philologist can intervene in language and behavioral problems due to mobile dependence on a disorder with Attention Deficit Disorder with or without hyperactivity (ADHD) at high school

The specific pedagogical and didactic methodology focuses on the formulation of the teaching goal and the formulation of the curriculum through the preparation of an annual, monthly, weekly and daily teaching program.

The philologist with the daily teaching intervention implements the differentiated language program in language and at the same time attempts to address some of the emotional difficulties and some of the behavioral problems of the particular student with ADHD. For this reason, the use of the smart mobile was used, as a pedagogical tool for the individual teaching of the grammatical rules of the first module of the Modern Greek Language in the case of Paraskevas. This teaching method (Kyriacou *et al.* 2013) found in the results that it was even able to apply the grammatical rules, solving a series of exercises, which helped to better consolidate them. It is also worth pointing out that recording the baseline time by using a clock the duration of the intervention. That is why we used the image of the character from Paraskevas' favorite game in the teaching program because it was positively evaluated as a particular interest that can facilitate the development of the learning process. The next learning step was to be able to calculate the online time spent with the game and to realize if it can choose alongside what it does and some of the lessons' exercises in the home, with the help of his sister. Thus, the watches have been differentiated from conventional, acquiring the form of the favorite warrior that precedes the background of the mobile phone.

The warrior depicted on the mobile desktop, which was used to measure the time of intervention, is from the video game "PUBG". It is one of his favorite games, so Paraskevas spends about five hours a day playing on the mobile. In this way, the dependence of the student on ADHD was used in the curriculum because it was positively evaluated as a particular interest that can facilitate the development of the learning process.

The data of reading errors are collected from the daily working time with the Internet using as differential pedagogical material with interactive teaching time about 6-8 hours a day. The teaching priorities have posted after the Informal Pedagogical Assessment. Also, he was in the 19th semester of formal and compulsory education, as baseline of our study with the perceptual reading in the 11st semester. So, we have studied the areas of observations with the IPA, the sum of deviations from baseline, the average of deviations, the teaching priority and the teaching goal.

1. The areas of observations from the learning readiness with IPA were to Oral (O) + psychomotor (P) + cognitive (C) + emotional (E) skills, gave us the sum and the average of deviations from baseline $(O+P+C+E/4=)$ $15+17+15+11/4=58/4=15$ semester of formal and compulsory education, that showed us four semesters deviation. The teaching priority and the goal were from the neurodevelopment area of the emotional organization with emphasis to Interest in learning.

2. The areas of observations from the special education needs with IPA were to Learning readiness (L)+ Basic Academic Skills (B) + Social Skills and Environmental Adaptation (S) + Creative Activities (C) + Pre-Professional Readiness (P)skills, gave us the sum and the average of deviations from baseline $(L+B+S+C+P/5) =15+11+16+16+12/5=70/5=14$ semester of formal and compulsory education, that showed us five semesters deviation. The teaching priority and the goal were from the basic academic skills with emphasis to understanding.

3. The areas of observations from the general learning difficulties with IPA were to Language Skills (L.S) + Skills of Preparedness (S.P) + Skills of Mathematics (S.M) + Skills of Behavior (S.B) skills, gave us the sum and the average of deviations from baseline $(L.S + S.P + S.M + S.B /4)=11+14+13+14/4=52/4=13$ semester of formal and compulsory education that showed us six semesters deviation. The teaching priority and the goal were from the language skills with emphasis to understanding.

4. The areas of observations from the Specific learning difficulties with IPA were to Perceptual skills (P.S) + Mind skills (M.S) + Graphic space skills (G.S.S) + Basic reading skills (B.S)+ Mathematical skills (M.S) + Behavior skills (B.S), gave us the sum and the average of deviations from baseline $(P.S + M.S + G.S.S + B.S + M.S + B.S/6=)$ $16+14+17+16+13/6=76/6=12$ semester of formal and compulsory education, that showed us seven semesters deviation. The teaching priority and the goal were from the behavioral skills with emphasis to reading self-image.

4.3. The Relationship between Siblings

The evaluation of the effectiveness of the interventions for the dossier and the mobile, as noted in the fifth stage of the TISIPFSEN, and is consistent with the estimates of the intermediate and final informal pedagogical assessment (IPA) for student learning readiness. In more detail, the initial IPA recorded pupil deviations, indicating the need for intervention with an emphasis on the area of cognitive abilities. It has also highlighted the need to diversify the educational process and apply different educational methods and materials. The use of the IPA with BSCL was a prerequisite for the design of structured learning curricula for Paraskevas according to its skills. The informal pedagogical assessment (IPA)was therefore a tool for recognizing the developmental level of Paraskevas as well as a tool on the basis of which diversified pedagogical material was established to achieve its potential developmental stage, in accordance with socio-learning theories of learning (Vygotsky, 1978).

Still, using the learning theories of learning (Tomatis, 2005) with an emphasis on observing the organization of teaching according to the student-centered model and the cooperative method and the relationship that develops between student and teacher in the context of spatial integration can improve the efficiency of the learning process.

5. Conclusions – Proposals

The findings of the present study record the effectiveness of individualized differentiated Special Education and Training interventions by a philologist-sister in a disability-impaired or non-hyperactivity disorder (ADHD) student, with a pre-eminent type, as noted by the observations and the recording, according to the informal pedagogical assessment (IPA), carried out in three phases: before, during and at the end of the teaching interventions.

The IPA has been an effective tool for the philologist who seeks to intervene in the literary courses regarding the recording of discrepancies in the case study relative to the pupil's age and class of study in terms of learning readiness and special educational needs and the specific learning difficulties.

The conclusion drawn according to the findings of the thesis is that the sister philologist can intervene effectively in a student with ADHD, based on the IPA as a tool for observation and recording for the case study, but also as a tool, the findings of which will rely on her intervention. The sister-philologist is able to make the mobile phone a means of addiction, a useful educational teaching and learning tool, despite her initial fears and hesitations about whether Paraskevas will work with her. Of course, another conclusion that emerges from the study of our case is that the student with ADHD displays a greater refusal when the philologist is a person of his or her relatives' environment than if he was "unknown".

In conclusion, it is worth highlighting the need for further research on Informal Pedagogical Assessment and Internet Addiction as well as the factors involved in it for students with ADHD to convert the mobile phone from an "addiction" tool into an educational and pedagogical tool.

Researchers such as Strogilos and Avramidis (2017) say the study of the case poses the risk of lack of objectivity as a study becomes transparent if the investigator's principles are communicated at the beginning of the research and he takes the necessary measures to limit their influence on the analysis and interpretation of his data. Particular weight was given to the need for objective "distance" from any interpretation of the observations, because the philologist and supporter of learning integration had a dual role as being the biological sister of the case student.

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References

- ADHD-Europe, 2019. *European Declaration on the diagnosis and treatment of adults with ADHD*. Retrieved 11 10, 2018, from National Association of People with Attention deficit hyperactivity Disorder (ADHD): <https://www.adhdeurope.eu/> and <http://www.adhdhellas.org>
- American Psychiatric Association, 2013. *Diagnostic and statistical manual of mental disorders fifth edition (DSM V)*. Washigton, DC: American Psychiatric Publishing. <https://doi.org/10.1176/appi.books.9780890425596>
- Avramidis, E. and Norwich, B., 2015. SEN: the state of research - from methodological purism to pluralistic research progress. In: L., Peer, and G. Reid, eds. 2015. *Special educational needs*. 2nd ed. London: Sage. pp. 22-44.
- Avramidis, E., Lawson, H. and Norwich, B., 2010. Difficulties in learning literacy. In: R. A. D. Wyse, ed. 2010. *The international handbook of English, language and literacy teaching*. London: Routledge. pp. 389-400.
- Bonthuys A, Botha K, and Breytenbach W., 2018. The effect of the Tomatis® Method on self-regulation in a sample of South African university students. *Journal Psychol Cognition*, 3(1), pp. 16-23.

- British Dyslexia Association, 2018. *Dyslexia research information: BDA definition of dyslexia*. [online]. Available at: <<http://www.bdadyslexia.org.uk/about-dyslexia/further-information/dyslexia-research-information-.html>> [Accessed on 20 August 2018].
- Christakis, K., 2011. *Behavioral problems in school age*. Athens: Diadrasi (in Greek).
- Christakis, K., 2012. *The child and the teenager in the family and school*. Athens: Grigoris (in Greek).
- Clarke, A. R., Barry, R. J., Mccarthy, R., and Selikowitz, M., 2001. Excess beta activity in children with attention-deficit/hyperactivity disorder: an atypical electrophysiological group. *Psychiatry Research*, 103(2), pp. 205-218. [https://doi.org/10.1016/S0165-1781\(01\)00277-3](https://doi.org/10.1016/S0165-1781(01)00277-3)
- Critchley, M., 1981. Dyslexia: An overview. In: G. Pavlidis, and T. R. Miles, eds. 1981. *Dyslexia research and its applications to education*. Chichester: Wiley & Sons. pp. 1-12.
- Drossinou-Koreas, M. and Periferakis, Th., 2018. Targeted, individual, structured, inclusion programs of pre-vocational readiness for students with special education needs (TISIPfSEs). *International Journal of Latest Research in Humanities and Social Science (IJLRHSS)*, 1(4), pp. 28-35.
- Drossinou-Koreas, M., 2017. *Special education and training. The special education proposal for children and young people with special needs*. Patras: Oporttuna (in Greek).
- Fox, P. and Avramidis, E., 2003. An evaluation of an outdoor education programme for students with emotional and behavioural difficulties. *Emotional and Behavioural Difficulties*, 8(4), pp. 267-283. <https://doi.org/10.1080/13632750300507025>
- Gibson, S., and Kendall, L., 2010. Stories from school: Dyslexia and learners' voices on factors impacting on achievement. *Support for Learning*, 25(4), pp. 187–193. <https://doi.org/10.1111/j.1467-9604.2010.01465.x>
- Kauffman, J. K., 2001. *Characteristics of emotional and behavioral disorders of children and youth*. 7 ed. Upper Saddle River, NJ: Prentice Hall.
- Kyriacou, C., Avramidis, E., Stephens, P. and Werler, T., 2013. Social pedagogy schools: Student teacher attitudes in England and Norway. *International Journal of Inclusive Education*, 17(2), pp. 192-204. <https://doi.org/10.1080/13603116.2011.629689>
- Markakis, E. and Drossinou-Korea, M., 2000. Experimental curriculum for special learning difficulties (Dyslexia). In: K. Christakis, ed. 2000. *Children with special needs in primary school: Theoretical and practical approach*. Athens: Atrapos. pp. 321-350 (in Greek).
- Paraskevopoylos, I, N. and Hervert, M., 2013. Child aggression. Seven of its hostile forms. In: I. Paraskevopoylos and M. Herbert, eds., 2013. *Psychological problems of children and adolescents. Prevention, early diagnosis, therapeutic intervention*. Athens : Pedion. pp. 340-385 (in Greek).
- Porpodas, K. (1981). *Dyslexia: The special disturbance in the learning of written speech*. Athens: Morphotikh (in Greek).
- Strogilos, V. and Avramidis, E., 2017. The cultural understanding of inclusion in diverse settings: Support services and collaboration. In: M. T. Hughes and E. Talbott, eds. 2017. *The Wiley handbook of diversity in special education*. Chicago: Wiley Publications. pp. 87-114. <https://doi.org/10.1002/9781118768778.ch5>
- Tomatis, A. A., 1972. *Education et dyslexie [The ear and the voice]*. Translated from French by R. Prada and P. Sollier. Paris: ESF.
- Vygotsky, L. S., 1978. Interaction between learning and development, Chapter 6. In: L. S. Vygotsky, M. Cole, V. John-Steiner, S. Scribner, and E. Souberman, eds. 1978. *Mind in society: The development of higher psychological proceses*. Cambridge, MA: Harvard University Press. pp. 79-91.