



RELATION BETWEEN SELF-CONCEPT - SELF-ESTEEM OF HIGH SCHOOL STUDENTS WITH LEARNING DIFFICULTIES AND PARTICIPATION IN BULLYING

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Abstract:

The object of this research is: (i) to explore the differentiation of levels of self-concept and self-esteem among high school students with learning difficulties (experimental group) and their classmates without learning difficulties (control group); (ii) to check as well as the predictability of the correlation between self-esteem and self-concept of high school students with or without learning difficulties with the frequency of their participation in Bullying as victimisers, victims and observers. The results of the survey confirmed the following: i) statistically significant differences between the groups of students with and without learning difficulties for the subscales that explain the general school capacity ($t(148) = 2.17, p = .031$), the athletic ability ($t(147) = -2.11, p = .027$) and the ability in language courses ($t(147) = 2.54, p = .012$), ii) statistically significant differences in gender and general school capacity ($t(79) = -2.97, p = .004$) between the two groups, iii) a moderate correlation of academic self-concept with physical self-concept ($r = .557, p = .000$), with social self-concept ($r = .542, p = .000$) and with emotional self-concept ($r = .557, p = .000$) was found for students with learning difficulties.

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1. Introduction

The person's perception of his abilities and individual characteristics is inextricably linked to the perennial need of man to find his identity, to answer a question that bedevils him from his very first steps. The answer to the question, "who am I?", leads, on the one hand, to a crystallized image of oneself and, on the other, this universal and transparent self-awareness will be the "guide" of all one's efforts. How a person perceives oneself is in direct correlation with the behavior one adopts, the way one expresses and decodes the feelings of others (empathy), the code of principles and values that one embraces, the setting of the goals to be attained, one's dreams, hopes and aspirations. The view that self-knowledge is strongly interrelated with human existence itself is the predominant core of all theories that study the processes of developing self-knowledge and behavior (Makri-Botsari, 2001; Pajares & Shunk, 2005; Mead, G. H., 1934) In recent decades a great deal of research activity on self-study can be found, focusing mainly on individual and developmental differences and the decisive functional role of self-concept and self-esteem in the self-system (Makris-Botsari, 2001). However, in the recent past (the late 1980s), there was confusion in both the formulation of a commonly accepted definition of self and the level of clarification of its terminologies and its measurement mechanisms, because of the use of the prefix "self" as identical with the very term self (Byrne, 1996a; Harter, 1990; Hattie, 1992; Wylie, 1979, 1989; Makri-Botsari, E., & Robinson, P., 1991).

Self-concept and self-esteem are the basic building blocks of self-synthesis. According to Makris-Botsari (2001), self-understanding is the cognitive description of the concept of self and represents a statement, a description or a belief of the individual for oneself, while self-esteem represents the emotional side and it refers to the overall view one has of oneself value as a person. The social and cultural environment in which the individual develops plays a key role in shaping self-concept.

The study of the effect the social environment has on the development of children's self-concept is the central axis of the field of educational and pedagogical psychology. The majority of research shows that the greater the social support the child receives from the persons in his or her surrounding environment, the more positive his/her appreciation for him/herself is (Harter, 1985a; 1985b; 1990a; Hattie, 1992; Rosenberg, 1986). The greatest confusion was between the differentiation in the concept of self-concept and self-esteem. Today it is generally accepted that self-concept and self-esteem are the two basic components of the concept of self. Self-concept is the cognitive description of the concept of self and represents a statement, a description or a conviction of the individual for oneself. Self-esteem represents the emotional side and it refers to the overall view of one's value as a person (Makri-Botsari, 2001). The concept of social support is a very important factor in enhancing the optimization of individual skills as well as individual's expectations, and it is achieved through positive interpersonal interaction (McCombs, 1991). The most important providers of social support for children

during their schooling period are parents, classmates, friends and teachers (Harter, 1990b). Shavelson, Hübner, and Stanton (1976) presented a hierarchical model to describe the multidimensional structure of self-concept, a model that decisively contributed to studying the concept of self-perception and to producing reliable measurement tools. The result of the research activity was the definition of the seven levels of the structure of self-concept: it has a hierarchical structure, stable at the higher levels and less stable at the lower ones, it gradually acquires more dimensions, it has a descriptive dimension, and it is evaluative and distinct from the rest of the personal structures (Marsh & Shavelson, 1986; Shavelson, R. J., Hubner, J. & Stanton, G. C., 1976). Marsh & Shavelson (1986) highlighted the distinction between the self-concept of an individual for oneself as an integral personality and the self-concept of one's own skills in various cognitive fields one engages in and in any other personal pursuits. The term global self-concept refers to the cognitive description of the whole self, while domain-specific self-concept relates to the cognitive description of the person for particular areas of activity (academic, social, physical). It is nowadays commonly accepted that students' self-concept of themselves has a decisive effect on learning progress; therefore, since it is considered to be an extremely important promotional factor, it constitutes a central pillar of research that studies academic progress and positive attitudes adoption (Pajares & Shunk, 2005).

All researches refer to the strong correlation of academic self-concept with learning progress, but not with general self-concept or general self-esteem (emotional self-understanding), (Byrne, 1984; Byrne, B. M. 1996b; Hansford & Hattie, 1982; Marsh, 1990b, 1993a). In addition to the relationship between self-concept and school performance, researchers investigate the causal link between these variables (Makri-Botsari, 2001). A part of scholars agrees to accept the self-enhancement model, believing that good school performance is the result of a positive self-concept, while another part of researchers believes that good school performance is beneficial for students to develop a positive image for themselves and are supporters of the skill development model. According to other scholars, there is a mutual interaction between school performance and self-concept, a continuous feedback process between them; these are the advocates of the so-called reciprocal effects model. The results of recent research indicated the two-way causal relationship between the self-concept of physical fitness and athletic behaviors (frequency of exercise and athletic performance) (Papaioannou, & Theodorakis, 2006; Marsh & Perry, 2004; Papaioannou, Bebetos, Theodorakis, Christodoulidis, & Kouli, 2006).

Our research explores the interconnection grid of high school students' self-esteem and self-concept with learning difficulties and bullying, as learning difficulties and bullying are two variables that have a decisive impact on the process of behavior development, as well as on social and psycho-emotional adaptation. The existence of a learning difficulty, even of a mild form, can lead to serious situations for the emotional development of the child. In particular, the difficulty of meeting the expectations of others, the feeling of being inferior to one's peers, and the repetitive experiences of school failure one experiences every day, cause him/her unpleasant feelings such as a decrease

in self-confidence, negative attitude towards oneself or others, reduced general self-esteem, disappointment and anger (Maridaki-Kassotakis, 2009). Therefore, inevitably many children with learning difficulties develop unacceptable behaviors ranging from withdrawal and passivity to aggression and delinquency. Research activity shows that many children with learning difficulties may manifest verbal or physical aggression, negative self-promotion, isolation, attention and concentration problems, delinquent or adversative behavior, nervousness and anger explosions (Koliadis, 2010). The low self-concept of children with learning difficulties is also reflected in the mistaken appreciation they have of their social skills. Despite their high intellectual potential, they are not able to objectively assess their social interaction, as opposed to children without learning difficulties (Al Zyoudi, 2010). As a result of the successive school failure, students with LD experience significantly high levels of anxiety and participate in adversative or/and delinquent behaviors (Eissa, M., 2010; Gallegos, Langley, & Villegas, 2012; Maag & Reid, 2006; Peleg, 2011; Svetaz, Ireland, & Blum, 2000). Nowadays, and following a long and scientifically substantiated investigation, it has been made clear that the victimization of young children and adolescents has a significantly negative impact on their academic path, their social adaptation and on the development of appropriate strategies for achieving a healthy psycho-emotional balance.

The negative consequences of bullying are manifold and characterized by intensity and duration and they affect all participants regardless of their role (victims – victimisers or observers), (Nansel et al., 2001; Olweus, 1994; Perry, Hodges, & Egan, 2001). Moreover, learning under-performance, problems of psychosocial adaptation and morbid pathological effects on the physical health of the victimisers and victims alike are the direct consequences of bullying (Crick & Bigbee, 1998; Rigby, 2000). Students with learning difficulties, as they already have difficulties in their social and psycho-emotional development (the consequences of the inconveniences caused by the learning difficulties), they run the risk of facing even more acute problems in their (social-psychological) adaptation, as a result of their possible victimization (Coie & Cillessen, 1993; Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D., 1998; Morrison & Cosden, 1997). The US Department of Education has included in the possible causes of school bullying also low school performance (D. O. E., 2010), in its effort to legally safeguard the inalienable right of all students to be educated in a healthy and safe environment. Students with learning difficulties due to their low performance have a number of features such as low self-esteem, reduced self-concept, high levels of anxiety, post-traumatic stress, increased dropout rates, etc. that turn them into a group of high-risk students prone to bullying. Kavale and Forness (1996) calculated that the rejection and/or low acceptance of children with LD were related to *"a perceived lack of communication ability (verbal and non-verbal), with reduced empathy, low social status, poor relations peer-to-peer rejection, factors that make students with MS unprotected and vulnerable to further victimization. Good relations with peers do not only play a decisive role in critical aspects of the stages of child development"*. Good relationships with peers not only play a crucial role in critical aspects of the stages of child development (Boivin, Hymel, &

Bukowski 1995; Coie & Cillessen, 1993; Hartup, 1996; La Greca, 1997; Parker & Asher, 1987; Hartup, 1992), but they also function protectively as the presence of friends sometimes discourages and sometimes prevents the bullying behavior of the victimizers (Hugh-Jones & Smith, 1999; Schwartz, McFadyen-Ketchum, Dodge, Pettit & Bates, 1999). Conversely, the lack of social support for victims allows victimizers to intimidatingly act, since there is no retaliation from the victim's social environment (Boulton, 1995; Egan & Perry, 1998; Hodges & Perry, 1999). Students with LD, in their effort to satisfy their need for social recognition through friendly relationships with their peers, associate children with behavioral problems such as adversative, provocative, aggressive and often delinquent behavior (Pearl & Bay, 1999). According to teachers' estimates, students with LD have much more frequent and intense problems of distraction, hyperactivity and impulsivity both during the educational process and in their social interaction (breaks, school events, leaving school etc.), (Kavale & Forness, 1996; Pearl & Bay, 1999). However, Kavale and Forness (1996) mention that the behavioral problems of students with LD may be the result of failing to be integrated into the school environment.

Creating a favorable ambience in which students with learning difficulties will develop their social skills is considered a basic prerequisite for achieving it. Kavale and Forness (1996) mention that the low social acceptance of children with learning difficulties is an 'incriminating' factor for their victimization. The results of the research conducted by Kaukiainen et al. (2002) show that factors such as learning-social unskillfulness and low self-concept, which are characteristics of children with LD, are directly related to the isolation and subsequent victimization of these children; and, in order to limit their negative effects on the process of integration and acceptance of these children, it is necessary for them to develop skills for creating and maintaining social relations (Kaukiainen et al., 2002).

2. Methodology

There is a significant number of surveys, both domestic and worldwide, that have investigated levels of self-concept - self-esteem, either of standard development students or of those with learning difficulties; the comparison between the aforementioned levels has been conducted between the two student subgroups (namely with or without learning difficulties) while their role in school bullying incidents examined as well as. In our research, we attempted to interconnect all the above variables and all their possible correlations. Our primary focus is on detecting the impact of learning difficulties on the formation of self-concept - self-esteem and on whether the high or low level of self-concept - self-esteem is related to participation in bullying and with what role (victim, victimiser and observer). Sub-topic objectives were:

- Correlation of the educational level and profession of parents with the formation of sub-levels of self-concept and self-esteem of students.
- Examination of the evolutionary path of self-concept-self-esteem and the frequency of participation in bullying in relation to the school grade.

- Correlation between levels of self-concept - self-esteem and gender-based bullying involvement.

Consequently, at the research level, there are likely to be differences in levels of self-concept - self-esteem among students with or without learning difficulties, or differences in the frequency of participation in bullying; also differences in relation to gender, and in educational/professional parents' profile. Finally, there will be relevance between the different variables of our research.

2.1 Sample

The sample consisted of 150 high school students attending Secondary Education schools in Western Thessaloniki. The experimental group was composed of 68 students (45.33%) with diagnosed learning difficulties, while the control group was composed of 82 students (54.66%) without learning difficulties. Students who were diagnosed with a mental disability and developmental disorders (autism spectrum) were excluded from this study.

Table 1: Sample data

Participant students					
	Learning difficulties		Without learning difficulties		Total
Grade	1st Grade	25	1st Grade	9	34
	2nd Grade	19	2nd Grade	50	69
	3rd Grade	24	3rd Grade	23	47
	Total	68		82	150

Table 2: Gender

Participant students / gender					
	Learning difficulties		Without learning difficulties		Total
Gender	Male	44	38		82
	Female	24	44		68

2.2 Research Tools

For the collection of the data, PATEM III (Self-assessment - Self-perception) questionnaire of Makris-Botsari (2013), as well as that of Professor G. Pavlidis about bullying, were used. The data collected from the questionnaires were coded and analyzed with the SPSS social science statistics package, version 24.0 for Windows. The first phase of the analysis had to do with the encoding of SPSS questions and the digitization of data. Statistical analyses were made with the SPSS / PC + Program (Statistical Social Science Package). The evaluation of statistical assumptions was predetermined at the probability level $\alpha = 0.05$. Additionally, the means and standard deviations for all the variables under consideration are presented. Mean and dispersion indices such as standard deviation were calculated. The first way of presenting the data was through frequencies.

Then, we had the method of cross-tabulation, that is, we presented some data cross-referenced with another element, such as gender, which is the most common in this research. With cross-tabulation, we are able to get more information about research

variables and make the descriptive analysis more detailed. In all cases where Anova or t-Test was used, the Kolmogorov-Smirnov and Levene tests were applied. The first test is used to check the regularity of the sample and its index must be above 0.10 and the second one is to check the uniformity of the sample variance which must be above 0.05. In most cases, the results did not deviate from these limits. Subsequently, a univariate scattering analysis (ANOVA) was conducted to reveal any differences in participants' estimates among the disclosed agents of the factors under consideration and their demographic characteristics. ANOVA is used when the parameter, in relation to which we want to check for differences between the means of a variable, is arithmetic. If the groups are different then it is concluded that the independent variable has an influence on the dependent one. In addition, statistical tests were performed to find correlations with the Pearson r.

3. Results

The results of the survey confirmed the following: i) statistic differences were found between groups of students with learning difficulties and without learning difficulties for the sub-scales explaining the general school capacity($t(148) = 2.17, p = .031$), sports ability ($t(147) = -2.11, p = .027$) and ability in language courses ($t(147) = 2.54, p = .012$), (ii) it was found out statistically significant difference in gender and general school capacity ($t(79) = -2.97, p = .004$). , iii) a moderate correlation of academic with physical self-concept ($r = .557$), also with social self-concept ($r = .542$) and emotional self-concept ($r = .557$) was found for students with learning difficulties iv) as well as the correlation between the levels of self-esteem and self-concept of students with learning difficulties and the frequency of their participation in bullying as observers, victimisers or victims was ascertained.

At this point, the descriptive elements (means) that indicate the importance of self-concept and self-esteem levels of students with or without learning difficulties will be presented. From the data analysis, there were no statistically significant differences in the mean importance between the two subgroups of students (with or without learning difficulties). It should be noted that all students with learning difficulties receive educational support from the teachers of the integration class they attend. Tables 3, and 4 below show averages and standard deviations by a group of students with or without learning difficulties.

Table 3: Means, min-max & standard deviation of self-esteem – self-concept values of students with learning difficulties (N = 68)

Students with learning difficulties			
	N	Min-max	Mean (standard deviation)
Proficiency in language courses	68	(1.40-4.00)	2.5588 (.40380)
Physical appearance	68	(1.60-3.60)	2.4118 (.439650)
Conduct behavior	68	(1.00-4.00)	2.4206 (.48270)
Close friends	68	(1.20-3.80)	2.220 (.45337)

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Self-esteem	68	(1.70-5.10)	2.3985 (.44838)
Athletic ability	67	(1.60-3.60)	2.5493 (.42404)
General scholastic ability	68	(1.40-4.00)	2.5618 (.40777)
Relations with interlocutors	68	(1.40-3.40)	2.3324 (.44602)
Relationships with parents	68	(1.40-3.60)	2.4824 (.48774)
Ability in mathematics	68	(1.40-3.40)	2.4029 (.41537)
Valid N (listwise)	67		

Table 4: Means, min-max & standard deviation of self-esteem – self-concept values of students without learning difficulties (N = 82)

Students without learning difficulties			
	N	Min-max	Mean (standard deviation)
Proficiency in language courses	81	(1.40-3.20)	2.4123 (.29891)
Physical appearance	82	(1.40-8.80)	2.5073 (.79827)
Conduct behavior	81	(1.60-8.40)	2.6074 (.98765)
Close friends	82	(1.40-3.00)	2.1780 (.24747)
Self-esteem	82	(1.90-4.50)	2.4561 (.30675)
Athletic ability	82	(1.80-3.40)	2.6756 (.30573)
General scholastic ability	82	(1.40-3.20)	2.4317 (.32428)
Relations with interlocutors	82	(1.20-3.20)	2.3366 (.35815)
Relationships with parents	82	(1.80-3.60)	2.4976 (.32697)
Ability in mathematics	82	(1.60-3.40)	2.6537 (.29822)
Valid N (listwise)	80		

The analysis of the survey data revealed a statistically significant difference between the groups of students with and without learning difficulties for the subscales that explain the general school ability ($p = .031$), the athletic ability ($p = .027$) and the ability in language courses ($p = .012$). In addition, there was no statistically significant gender difference in the group of students with learning difficulties and the studied subscales, while in the group of children without learning difficulties was found a statistically significant difference in gender and overall school ability ($p = .004$) was found.

Afterwards, we studied the possible differences between the (self-concept scales) of two groups of students using the t-test for independent gender samples. In the group of children without learning difficulties a statistically significant difference in gender and academic self-concept was found ($p = .028$). Afterwards, a low positive correlation of emotional with physical self-concept was found ($r = .227$, $p = .041$) for students without learning difficulties. There was also a moderate degree of positive correlation between academic and physical self-concept ($r = 0.557$, $p = .00$), social self-concept ($r = .542$, $p = .00$) and the emotional self-concept ($r = .557$, $p = .00$) for students with learning difficulties.

Fluctuation analysis revealed a statistically significant difference over the element that explains both students' academic self-concept and the grade they attend ($p = 0.05$), while the Bonferroni post-hoc test revealed a statistically significant difference between the means of the groups of first-grade students and those of third-grade students as shown in the following graph.

Fluctuation analysis revealed a statistically significant difference over the element that explains the self-esteem of the students related to the father's higher level of education ($p = .036 < 0.05$) and mother's education ($p = .014$), as well as the social self-concept of the students with a higher level of education father ($p = .014$).

The following graphs outline the participation percentage of students in bullying as observers, as observers who acted in favor of the victim, as victims and as victimisers. There was no statistically significant gender difference regarding observers (boys (60.2%), girls (63.6%)), or active observers (boys (43.4%), girls (40.2%)). As to the victims, there was a statistically significant difference since the boys were victimized less than girls: 39.8% for the boys and 50% for the girls; finally, a small percentage difference was recorded for aggressive behavior as to the gender (boys (20.5%), girls (15.2%)).

Figure 1: Participation percentage as an observer

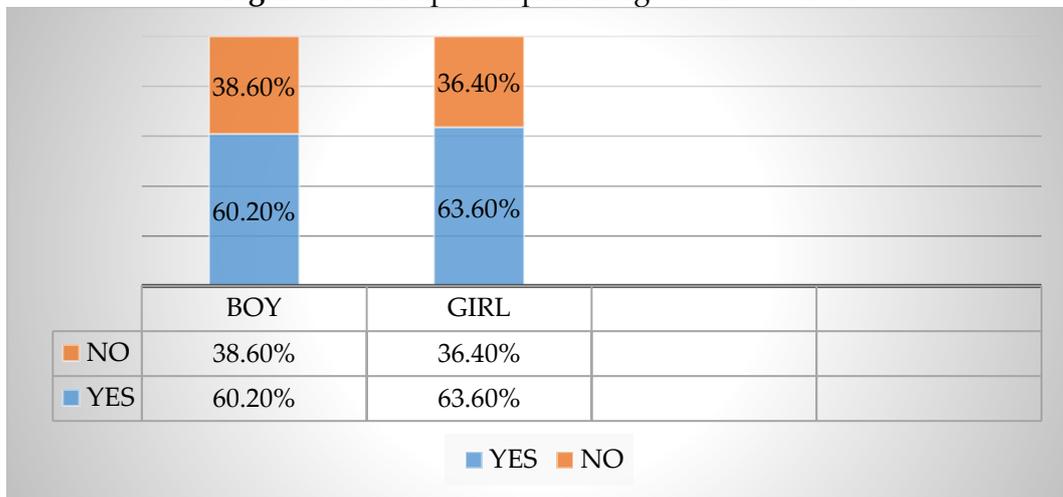


Figure 2: Participation percentage of observers who acted in favor of the victim

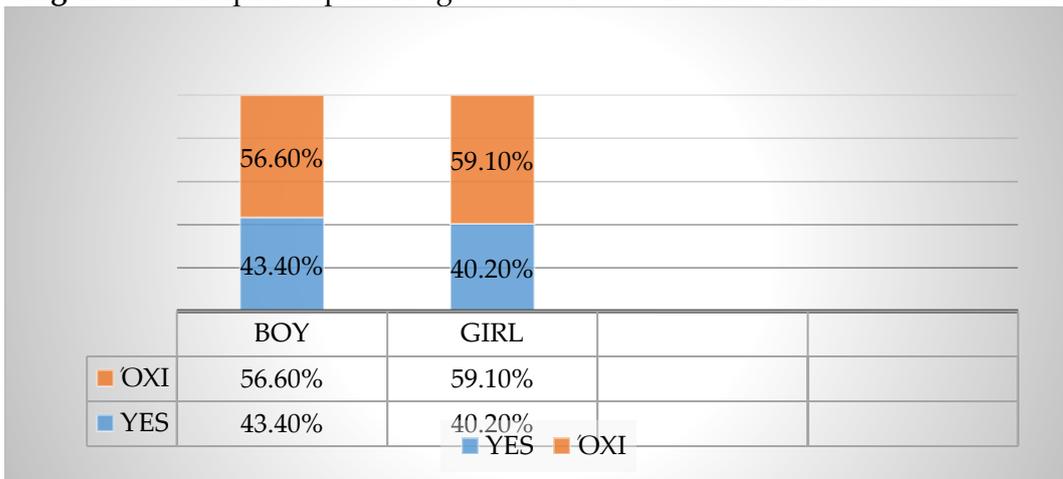


Figure 3: Participation percentage as a victim

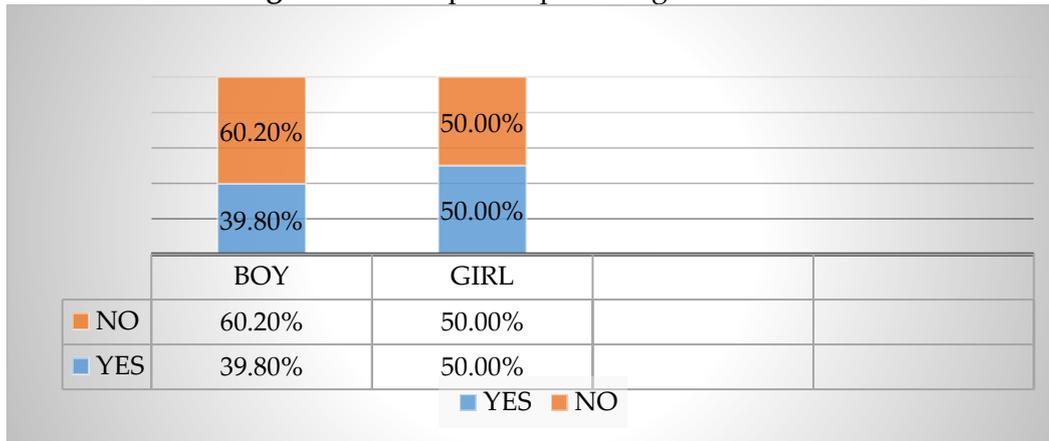
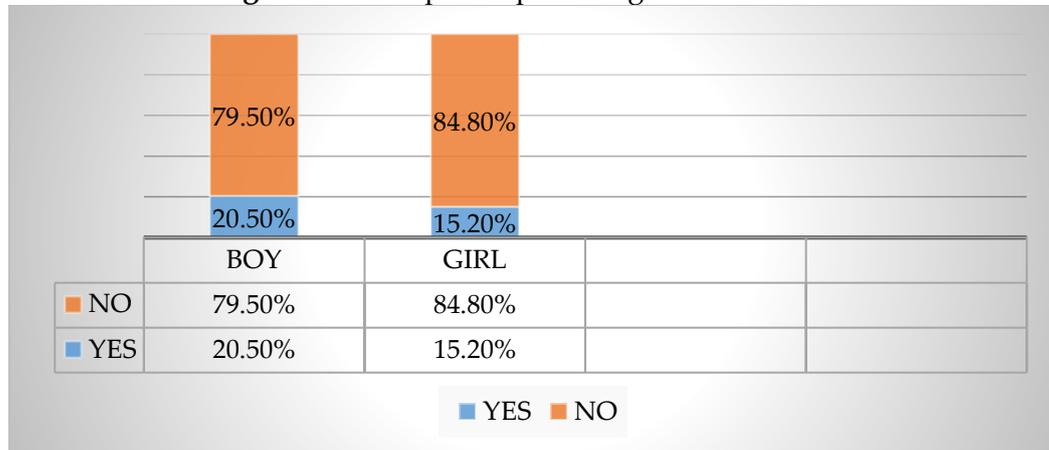


Figure 4: Participation percentage as a victimiser



There was a low positive correlation between bodily self-concept and self-esteem ($r = .177, p = .031$), between victimiser and self-esteem ($r = .177, p = .031$), also between physical and academic self-concept ($r = .506, p = 0.00$) and a small positive correlation between the total of observers and the part of them, who intervened in favor of the victim, was recorded. Finally, a low negative correlation between the victims and the academic self-concept was recorded ($r = -.166, p = .044$).

4. Discussion and Conclusion

The in-depth presentation of this research results demonstrates that some of the research assumptions, set at the beginning of this paper, were confirmed. In particular, with regard to the first research assumption, statistically, significant differences were found between groups of students with learning difficulties and without learning difficulties in specific areas of self-concept such as general school ability, athletic ability and ability in language courses. In terms of the second research assumption, namely the relation between general school ability and sub-levels of self-concept, statistically, significant differences between students with learning difficulties and without learning difficulties have been recorded. In relation to school bullying, statistically significant correlations

between self-esteem and student involvement in bullying from the victimiser's standpoint showed up.

In addition, it should be noted that the limited number of students who participated in the survey and the fact that students with learning difficulties all attended integration sections it may not allow the deduction of safe statistical conclusions. Therefore, the educational support, given for boosting students' self-esteem (with or without learning difficulties), is suggested to have a personalized approach taking into account the specific characteristics and especially the needs of each student. Also, it is necessary to promote and strengthen the functioning of support structures integration sections and to adapt the school environment to the real needs of all students. One School for Everyone should not be just an announcement, but a commitment of the educational community. Self-concept - self-esteem is in direct synergy with the school performance and the inner satisfaction of each student. More effective support for 'building' self-concept - self-esteem could be proved a determinant of individual success and happiness.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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Georgios Vrakas is a mathematician and teaches students with learning difficulties at the 4th high school of Stavroupoli in Thessaloniki. He is a PhD candidate at the University of Macedonia in Thessaloniki. In my doctoral thesis, I investigate the relationship between learning difficulties and ADHD with school bullying.

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