

Teachers attitude, personal reaction and proposal for effective treatment in developmental dyslexia. Comparisons between General and Special Education Teachers

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Abstract

The primary aim of the research was to explore teachers' attitude toward developmental dyslexia, to record their opinion about the effective strategies in order to treat developmental dyslexia and to capture teachers reaction to students with developmental dyslexia. A quantitative research was conducted in 204 primary and secondary education teachers using an appropriate questionnaire. Special Education teachers were more confident in their ability to teach children with special needs and considered that they were adequately trained to meet the needs of children with disabilities. Also, Special Education teachers agree to a greater degree that academic progress is possible in children with special needs and students with special needs should be included in regular education classrooms. In contrast, General Education teachers become more anxious when they learn that a student with special needs will be in their classroom.

Key Words: Teachers Attitude, Teacher Reaction, Effective Treatment, Developmental Dyslexia

Introduction

In recent decades, an increase in the number of children with 'own learning needs - of which they are part of a small proportion and dyslexia - which they attend, at all levels of education, is increasingly evident. This is likely to be due to a number of factors, such as the increased social need for education and education of all citizens, the generalization of the compulsory nature of education, the social demands for equality and equality between citizens, and the widening of the debate on (Wagner et al., 2022). In many countries abroad, there has already been awareness of the specific there is a growing tendency for the medical approach previously dominated and replaced by a more dynamic approach in the field of education. In the context of this philosophy, more and more countries are trying to develop the use of assessment of pupils with special educational needs for the implementation of appropriate education, which is mainly pursued with educational reforms and innovations and through tailor-made educational programs (Skočić Mihić et al., 2020). Also, the modern tendency in the European Union countries is to develop a policy of inclusion of pupils with special educational needs in joint schools, providing teachers with different ways of supporting such staff, training materials, teachers training and equipment (Yang et al., 2022).

In Greece, according to Anastasiou and Polychronopoulos (2009), some teachers and people from the educational environment believe that oral exams should be cancelled, because it is a very easy way of examination, even for pupils with special learning difficulties. The most relevant Greek study is Anastasiou and Polychronopoulou (2009), which surveyed the attitudes of 200 primary school teachers within the Attica region of Greece and found that teachers perceive a need for more adequate knowledge about how to teach children with special educational needs and that 'they do not share a totally positive attitude towards inclusion' (Anastasiou & Polychronopoulou, 2009). Konstantopoulou (2000) survey study which conducted with questionnaires with 250 language teachers from different areas of Greece has shown that school principals who were language teachers as well did not have good knowledge on signs of Dyslexia and possible causes. 87 % of the language teachers stated

that they were not competent to teach students with Dyslexia as there was a lack of teachers' training on Dyslexia and that there was confusion about the types of dyslexia (auditory, visual, mixed groups) (Konstantopoulou, 2000). Apart from Greece and according to the literature, children with Dyslexia usually feel isolated and excluded in their schools, and many of them are regularly teased or bullied (Humphrey & Mullins, 2002). A very strong example of this is the case of the fourth most prolific inventor in history, who admitted that "A teacher sent the following note home with a six-year-old boy: "He is too stupid to learn". That boy was Thomas A. Edison". Another strong example was that of Albert Einstein who "...did not speak until the age of three and teachers labeled him mentally slow": "Anyone who has never made a mistake has never tried anything new". According finally to Ranaldi (2003), most people have vague ideas about the causes of dyslexia, and they often consider it a sign of low intelligence, which results in the stigmatization of dyslexics (Gyarmathy & Vassné 2004). Edwards' (1994) study illustrates the negative experiences of dyslexic students at school and reveals that even successful and confident dyslexic students experience unfair treatment, discrimination, neglect and humiliation during school years.

Aim

The relevance of this research lies in its evaluation of teachers' beliefs and understanding of developmental dyslexia. Considering the current dearth of research on dyslexia and other learning disabilities in the Greek context, this study both contributes to existing knowledge and fills the literature gap by providing insight into how teachers conceptualize developmental dyslexia. This insight would be useful in understanding the misconceptions and beliefs about the developmental dyslexia that influence classroom practice. The primary aim of the research is to explore teachers' attitude toward developmental dyslexia, to record their opinion about the effective strategies in order to treat developmental dyslexia and to capture teachers reaction to students with developmental dyslexia. Also, secondary aim of the research is to investigate if the attitude, reaction and opinion about the effective strategies differ between General and Special Education teachers.

Methodology

Research Design and tool

In terms of the type of empirical data, the research is characterized as quantitative, since the perceptions of the subjects (of the sample teachers) expressed as answers to the various questions - mostly "closed" - are concentrated and reduced to specific attitudes. gradations and therefore can be expressed in quantitative - numerical terms during statistical analysis. Even the answers to some "open-ended" questions are analyzed and coded into categories, so that again the findings can be expressed in percentage by answer categories. The quantitative approach uses statistical analysis to arrive at a specific conclusion while allowing for comparisons between groups with different characteristics, for example comparisons of views by age group or years of service. It was also preferred because of the shorter time required to collect and analyze data compared to the qualitative method. For the purposes of this research, a questionnaire consisting of three sections was used as a tool. The first part of the questionnaire aimed to record teachers' reactions when they have students with developmental dyslexia. To this end, 9 questions were used on a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly Agree). The questions used were based on research by Wadlington and Wadlington (2005) and Gwernan-Jones and Burden (2009). The second part of the questionnaire was designed to record teachers' suggestions for effective management in cases of students with developmental dyslexia. To this end, 12 questions were used on a 5-point Likert scale (1 = Totally ineffective 5 = Totally effective). The questions used were based on a survey by Gwernan-Jones and Burden (2009). The third part of the questionnaire was designed to record teachers' attitude on the inclusion of students with developmental dyslexia. To this end, 13 questions were used on 5-point Likert scale (1 = Strongly Disagree, 5

= Strongly Agree). The questions used were based on a survey by Avramidi and Norwich (2002).

Sample

The research population was designated to be teachers serving in primary education units. In Greece and teachers serving in special education units in Greece. In the present study, the general strategy was to carry out convenience sampling (Creswell, 2014). A pilot survey was carried out to identify and correct any weaknesses or ambiguities in the wording of the questionnaire questions and in addition to estimate the total time it took to complete. So, the questionnaire was initially distributed to 5 primary education teachers and 5 special education teachers. Then, after some corrections were made and the questionnaire took its final form, it was distributed to teachers serving public and special education public primary schools. The questionnaire was distributed in the prefecture of Thessaloniki. In total, the questionnaires distributed to both categories of teachers were approximately 280, out of which 204 completed questionnaires were returned.

The demographics of the sample are presented in Table 1. The 64.2% (n=131) of the sample were female and 35.8% (n=73) were male. The 22.5% (n=46) of teachers worked in an urban area, 26.5% (n=54) worked in a semi-urban area, 22.1 (n=45%) worked in a community area and 28.9% (n=59) worked in a rural area. The 84.8% (n=173) of sample was General Education teachers and 15.2% (n=31) was Special Education teachers. Finally, it was observed that 72.4% (n = 147) of the teachers had a bachelor's degree while 14.8% (n = 30) had a postgraduate degree. In addition, only 25.6% (n = 52) had received Special Education training. The mean age of the teachers was 46.82 (SD = 8.06) years while on average they had 20.42 (SD = 7.78) years of service.

Table 1. Demographics characteristics of the sample

		n	%
Gender	Male	73	35.8%
	Female	131	64.2%
Area of school	Urban	46	22.5%
	Semi-urban	54	26.5%
	Community	45	22.1%
	Rural	59	28.9%
Position	General Education	173	84.8%
	Special Education	31	15.2%

Ethical considerations

Saunders et al., (2012) suggest that three ethical principles must be followed to achieve a high level of ethics in social studies. These principles are: ensuring a high degree of respect for the autonomy of individuals, work for the benefits of society as a main motivation and respect for privacy For these purposes the researcher enclosed a cover letter explaining the purpose of the study and a promise of confidentiality with copies of the questionnaire. With regard to confidentiality, this is fulfilled by excluding the names and identification numbers of the respondents from the questionnaire. Participants were also informed that their participation was completely voluntary and that they could be withdrawn at any time in line with Creswell (2014) suggestion that respondents should be informed of their right to participate or cease their participation at any time. Respondents were also informed that the researcher would be the only one to have access to the answers provided.

Statistical analysis

Descriptive statistics such as percentage (%), Mean (M) and Standard Deviation (SD) were used in order to capture teachers attitude toward developmental dyslexia and effective treatment of developmental dyslexia. Also, descriptive statistics were used in order to record teachers' reaction to students with developmental dyslexia. In addition, in order to investigate the existence of statistically significant between General and Special Education teachers, the t-test for two independent samples was used. The significance level was set at $\alpha = 0.05$ in the data analysis. Analysis was performed in SPSS version 26 software.

Results

Personal reactions in dyslexia

The results in Table 2 indicate that teachers feel significantly responsible for helping the child and using all the means they had (eg individual, working with parents, with specialist help, etc.) (M = 4.16, SD = 0.77). Moreover, teachers strongly agreed that if they had to manage a student with developmental dyslexia they would use Means and Materials to achieve the goals of the curriculum (M = 4.13, SD = 0.76). Also, teachers feel sympathy or compassion for a child with developmental dyslexia (M = 3.47, SD = 1.09). On the contrary, teachers express neutrality about whether they could deal with the case if they could involve parents in the process (M = 3.13, SD = 1.07) and if they had confidence in their ability to teach children with special needs (M = 3.02, SD = 1.11). Finally, teachers disagreed that they felt embarrassed, anxious, fearful of hurting the child (M = 1.99, SD = 0.87) and disagreed that they were appropriately trained to respond to the needs of disabled children (M = 1.99). = 2.58, SD = 1.32).

Table 2. Results about personal reactions in dyslexia

	1	2	3	4	5	M ± SD
I feel embarrassed, anxious, fear not to hurt the child	30.4%	48.5%	13.7%	6.9%	0.5%	1.99 ± 0.87
I feel sympathy or compassion for the child	7.4%	11.3%	21.2%	47.3%	12.8%	3.47 ± 1.09
I feel pressured and helpless	16.4%	24.9%	30.3%	25.4%	3.0%	2.74 ± 1.10
I am responsible for helping the child and I use all the means I have (eg individual, collaborating with parents, with the help of specialists etc.)	1.5%	1.5%	9.3%	54.9%	32.8%	4.16 ± 0.77
I know how to deal with students with dyslexia from personal experience.	11.8%	31.4%	26.5%	24.5%	5.9%	2.81 ± 1.11
I could deal with the case if I could involve parents in the process of dealing with the problem	5.9%	22.7%	35.5%	24.6%	11.3%	3.13 ± 1.07
Means and materials to achieve the objectives of the curriculum	0.0%	3.9%	10.8%	53.2%	32.0%	4.13 ± 0.76
I have confidence in my ability to teach children with special needs	9.4%	22.2%	35.5%	23.2%	9.9%	3.02 ± 1.11
I have been trained appropriately to respond to the needs of disabled children	24.1%	33.5%	14.3%	16.7%	11.3%	2.58 ± 1.32

1=Strongly Disagree, 2=Disagree, 3=Neither agree or disagree, 4=Agree, 5=Strongly agree; M=Mean, SD=Standard Deviation

In addition, an analysis was conducted to investigate the difference between General and Special Education teacher regarding personal reactions to dyslexia. The results of the t-test are given in Table 3. The analysis showed that there were statistically significant differences in personal reactions to dyslexia. More in detail, General Education teachers felt more pressured and helpless compared to Special Education teachers ($t = 3.431, p < .05, 2.84 \pm 1.05$ vs. 2.10 ± 1.23). On the contrary, Special Education teachers appeared to think that they were to a greater extent responsible for helping the child and using all the means they had ($t = -3.941, p < .05, 4.65 \pm 0.49$ against 4.08 ± 0.78) and to a greater extent know how to deal with students with dyslexia from personal experience ($t = -7.722, p < .05, 4.06 \pm 0.89$ vs. 2.59 ± 0.99). Finally, it was observed that Special Education teachers were more confident in their ability to teach children with special needs ($t = -8.471, p < .05, 4.35 \pm 0.75$ vs. 2.78 ± 0.98) and believe to a greater degree that they were appropriately trained to responded to the needs of disabled children ($t = -10.16, p < .05, 4.39 \pm 0.76$ against 2.25 ± 1.12). Similarly, Special Education teachers were more likely to use means and materials to achieve the goals of the curriculum in case of child with developmental dyslexia ($t = -4.566, p < .05, 4.68 \pm 0.54$ against 4.03 ± 0.75).

Table 3. Comparisons between General and Special Education teacher regarding personal reactions in dyslexia

	Position				t	p
	General Education		Special Education			
	M	SD	M	SD		
I feel embarrassed, anxious, fear not to hurt the child	2.03	0.85	1.74	1.00	1.692	.092
I feel sympathy or compassion for the child	3.48	1.03	3.42	1.36	0.270	.787
I feel pressured and helpless	2.84	1.05	2.10	1.23	3.431	.001
I am responsible for helping the child and I use all the means I have (eg individual, collaborating with parents, with the help of specialists etc.)	4.08	0.78	4.65	0.49	-3.941	.000
I know how to deal with students with dyslexia from personal experience.	2.59	0.99	4.06	0.89	-7.722	.000
I could deal with the case if I could involve parents in the process of dealing with the problem	3.09	1.05	3.32	1.19	-1.097	.274
Means and materials to achieve the objectives of the curriculum	4.03	0.75	4.68	0.54	-4.566	.000
I have confidence in my ability to teach children with special needs	2.78	0.98	4.35	0.75	-8.471	.000
I have been trained appropriately to respond to the needs of disabled children	2.25	1.12	4.39	0.76	-10.16	.000

1=Strongly Disagree, 2=Disagree, 3=Neither agree or disagree, 4=Agree, 5=Strongly agree; M=Mean, SD=Standard Deviation; t=t-test statistic, p=p-value

Proposals for effective treatment

The results in Table 4 indicate that teachers consider effective treatment of developmental dyslexia fees and positive incentives (M = 4.14, SD = 0.72) and multi-sensory techniques (M = 4.11, SD = 0.75). In addition, teachers found it important to manifest their acceptance of the

child, win confidence and try to restore confidence in themselves (M = 4.07, SD = 0.77) while believing that an important process is to try to learn more to deal with a child with Dyslexia (M = 4.15, SD = 0.86) and included the child in class activities (M = 4.05, SD = 0.81). Finally, teachers thought it helpful to apply words and letters discrimination exercises (M = 3.82, SD = 0.73), to apply self-assessment techniques that the child would use (M = 3.72, SD = 0.86) and to personalize the teaching for the child (M = 3.67, SD = 0.89).

Table 4. Results about proposals for effective treatment

	1	2	3	4	5	M ± SD
Fees and positive incentives	1.0%	2.5%	6.1%	62.6%	27.8%	4.14 ± 0.72
Negative aid	41.6%	42.6%	14.2%	0.5%	1.0%	1.77 ± 0.79
I would manifest my acceptance of the child, I would win his trust and I would try to restore the confidence in himself	2.0%	1.5%	10.3%	60.1%	26.1%	4.07 ± 0.77
I will personalize the teaching for the child	2.0%	6.5%	29.1%	46.7%	15.6%	3.67 ± 0.89
I would let the child decide when to participate in classroom activities	9.9%	39.1%	25.7%	21.3%	4.0%	2.70 ± 1.04
I would use multi-sensory techniques	1.0%	2.0%	10.9%	57.4%	28.7%	4.11 ± 0.75
I would apply self-assessment techniques that the child would use	0.5%	6.5%	32.0%	42.5%	18.5%	3.72 ± 0.86
I would apply words and letters discrimination exercises	1.5%	1.0%	25.7%	57.9%	13.9%	3.82 ± 0.73
I would ask the child to do the same work as other children	15.8%	42.1%	17.3%	20.3%	4.5%	2.55 ± 1.12
I would try to learn more to deal with a child with Dyslexia	2.0%	4.4%	5.9%	52.5%	35.3%	4.15 ± 0.86
I would involve the child in the activities of class	1.5%	3.9%	9.9%	57.6%	27.1%	4.05 ± 0.81
I would suggest attending the child in the integration section	5.9%	7.8%	26.5%	43.1%	16.7%	3.57 ± 1.05

1=totally ineffective, 2=ineffective, 3=Neither effective nor ineffective, 4=effective, 5=completely effective; M=Mean, SD=Standard Deviation

Subsequently, an analysis was conducted to investigate the difference between General and Special Education teacher regarding proposals for effective treatment. The results of the t-test are given in Table 5. The analysis showed that there were statistically significant differences in their proposals for effective treatment of developmental dyslexia. The results showed that Special Education teachers believe to a greater extent that appropriate treatment is based on personalize the teaching for the child (t = -2.442, p <.05, 4.03 ± 1.00 against 3.61 ± 0.85), let the child decide when to participate in classroom activities (t = .33.319, p <.05, 3.26 ± 1.24 against 2.60 ± 0.97), apply self-assessment techniques (t = -4.445, p <.05, 4.33 ± 0.84 against 3.61 ± 0.82), apply words and letters discrimination exercises (t = -2.334, p <.05, 4.103 ± 0.75 against 3.77 ± 0.72), asking the child to do the same work as other children (t = -2.400, p <.05, 3.00 ± 1.26 against 2.48 ± 1.07), involving child in class activities (t = -22.852, p <.05,

4.43 ± 0.79 against 3.98 ± 1.06) and child attending class integration (t = 183.118, p <.05, 4.10 79 0.79 against 3.47 ± 1.06).

Table 5. Comparisons between General and Special Education teacher regarding proposals for effective treatment

	Position				t	p
	General Education		Special Education			
	M	SD	M	SD		
Fees and positive incentives	4.11	0.64	4.26	1.03	-1.029	.305
Negative aid	1.70	0.70	1.90	1.11	-1.983	.091
I would manifest my acceptance of the child, I would win his trust and I would try to restore the confidence in himself	4.03	0.74	4.26	0.93	-1.482	.140
I will personalize the teaching for the child	3.61	0.85	4.03	1.00	-2.442	.015
I would let the child decide when to participate in classroom activities	2.60	0.97	3.26	1.24	-3.319	.001
I would use multi-sensory techniques	4.08	0.70	4.27	0.98	-1.258	.210
I would apply self-assessment techniques that the child would use	3.61	0.82	4.33	0.84	-4.445	.000
I would apply words and letters discrimination exercises	3.77	0.72	4.10	0.75	-2.334	.021
I would ask the child to do the same work as other children	2.48	1.07	3.00	1.26	-2.400	.017
I would try to learn more to deal with a child with Dyslexia	4.14	0.84	4.19	0.98	-0.325	.746
I would involve the child in the activities of class	3.98	0.82	4.43	0.63	-2.852	.005
I would suggest attending the child in the integration section	3.47	1.06	4.10	0.79	-3.118	.002

1=totally ineffective, 2=ineffective, 3=Neither effective nor ineffective, 4=effective, 5=completely effective; M=Mean, SD=Standard Deviation; t=t-test statistic, p=p-value

Attitude towards inclusive education

The results in Table 6 indicate that teachers strongly agreed that academic progress was possible in children with special needs (M = 3.99, SD = 0.71) and that self-esteem of children with special needs was increased when included in the regular education classroom. (M = 3.81, SD = 0.77). Also, teachers tend to agree that students with special needs should be included in regular education classrooms (M = 3.65, SD = 0.89) and that although children may differ intellectually, physically, and psychologically, all children can learn in most environments (M = 3.50, SD = 1.08). On the contrary, teachers tend to disagree that they are confident in their ability to teach children with special needs (M = 2.75, SD = 1.16), and they have been adequately trained to meet the needs of children with disabilities (M = 2.54, SD = 1.19). Also, teachers reported that students with special needs in the regular education classroom had the academic progress of the regular education student (M = 2.52, SD = 1.03).

Table 6. Results about attitude towards inclusive education

	1	2	3	4	5	M ± SD
I am confident in my ability to teach children with special needs	14.7%	28.9%	31.4%	16.2%	8.8%	2.75 ± 1.16
I have been adequately trained to meet the needs of children with disabilities	18.6%	39.7%	18.1%	15.7%	7.8%	2.54 ± 1.19
I become easily frustrated when teaching students with special needs.	12.3%	46.6%	30.9%	7.4%	2.9%	2.42 ± 0.90
I become anxious when I learn that a student with special needs will be in my classroom.	15.7%	28.9%	27.5%	24.5%	3.4%	2.71 ± 1.11
Although children differ intellectually, physically, and psychologically, I believe that all children can learn in most environments.	2.9%	19.6%	19.1%	41.2%	17.2%	3.50 ± 1.08
I believe that academic progress is possible in children with special needs.	0.5%	3.0%	13.8%	62.6%	20.2%	3.99 ± 0.71
I believe that children with special needs should be placed in special education classes	3.4%	19.6%	37.7%	27.5%	11.8%	3.25 ± 1.01
I can adequately handle students with mild to moderate behavioral problems	2.5%	9.8%	28.9%	47.5%	11.3%	3.55 ± 0.91
Students with special needs learn social skills that are modelled by regular education students.	6.9%	9.8%	24.0%	53.9%	5.4%	3.41 ± 0.98
It is difficult for children with special needs to make strides in academic achievement in the regular education classroom	5.4%	34.8%	40.2%	14.7%	4.9%	2.79 ± 0.93
Self -esteem of children with special needs is increased when included in the regular education classroom.	0.5%	5.9%	20.1%	58.8%	14.7%	3.81 ± 0.77
Students with special needs in the regular education classroom hinder the academic progress of the regular education student	15.7%	38.7%	25.5%	17.6%	2.5%	2.52 ± 1.03
Students with special needs should be included in regular education classrooms.	1.5%	6.4%	35.8%	38.7%	17.6%	3.65 ± 0.89

1=Strongly Disagree, 2=Disagree, 3=Neither agree or disagree, 4=Agree, 5=Strongly agree; M=Mean, SD=Standard Deviation

The results in Table 7 show that there are several statistically significant differences between General and Special Education teacher regarding attitude toward inclusive education. More specifically, it was observed that Special Education teachers were more confident in their ability to teach children with special needs ($t = -9.988, p < .05, 4.32 \pm 0.75$ against 2.47 ± 0.98) and considered that they were adequately trained to meet the needs. of

children with disabilities ($t = -11.69, p < .05, 4.32 \pm 0.65$ vs. 2.23 ± 0.96). In contrast, General Education teachers become more anxious when they learn that a student with special needs will be in their classroom ($t = 4.636, p < .05, 2.86 \pm 1.03$ against 1.9 ± 1.16). Special Education teachers agree to a greater degree that although children of different levels intellectually, physically, and psychologically can learn in most environments ($t = -4.852, p < .05, 4.32 \pm 0.75$ against 3.35 ± 1.07). Also, Special Education teachers agree to a greater degree that academic progress is possible in children with special needs ($t = -2.625, p < .05, 4.30 \pm 0.65$ against 3.94 ± 0.71) and students with special needs should be included in regular education classrooms ($t = -4.302, p < .05, 4.25 \pm 0.92$ vs. 3.53 ± 0.85).

Table 7. Comparisons between General and Special Education teacher regarding attitude towards inclusive education

	Position				t	p
	General Education		Special Education			
	M	SD	M	SD		
1. I am confident in my ability to teach children with special needs	2.47	0.98	4.32	0.75	-9.988	.000
2. I have been adequately trained to meet the needs of children with disabilities	2.23	0.96	4.32	0.65	-11.69	.000
3. I become easily frustrated when teaching students with special needs.	2.44	0.82	2.32	1.28	0.661	.509
4. I become anxious when I learn that a student with special needs will be in my classroom.	2.86	1.03	1.90	1.16	4.636	.000
5. Although children differ intellectually, physically, and psychologically, I believe that all children can learn in most environments.	3.35	1.07	4.32	0.75	-4.852	.000
6. I believe that academic progress is possible in children with special needs.	3.94	0.71	4.30	0.65	-2.625	.009
7. I believe that children with special needs should be placed in special education classes	3.25	1.02	3.19	0.98	0.307	.759
8. I can adequately handle students with mild to moderate behavioral problems	3.44	0.89	4.19	0.70	-4.466	.000
9. Students with special needs learn social skills that are modelled by regular education students.	3.42	0.95	3.35	1.14	0.350	.727
10. It is difficult for children with special needs to make strides in academic achievement in the regular education classroom	2.83	0.89	2.55	1.12	1.570	.118

11. Self -esteem of children with special needs is increased when included in the regular education classroom.	3.77	0.74	4.03	0.91	-1.720	.087
12. Students with special needs in the regular education classroom hinder the academic progress of the regular education student	2.32	1.02	2.00	0.97	1.934	.072
13. Students with special needs should be included in regular education classrooms.	3.53	0.85	4.25	0.92	-4.302	.000

1=totally ineffective, 2=ineffective, 3=Neither effective nor ineffective, 4=effective, 5=completely effective;M=Mean, SD=Standard Deviation; t=t-test statistic, p=p-value

Conclusion

Teachers' reaction toward students with Developmental Dyslexia

The results of personal reactions in dyslexia showed that teachers felt significantly responsible for helping the child and using all the means they had, using Means and Materials to achieve the goals of the curriculum and feeling sympathy or compassion for a child with developmental dyslexia. General Education teachers felt more pressured and helpless than Special Education teachers. On the contrary, Special Education teachers appeared to think that they were to a greater extent responsible for helping the child and using all the means they had and know how to deal with students with dyslexia from personal experience. Also, Special Education teachers were more confident in their ability to teach children with special needs. Results on proposals for effective treatment of dyslexia have shown that teachers consider effective treatment of developmental dyslexia fees and positive incentives and multi-sensory techniques. Also, teachers find it important to manifest their child's acceptance, gain confidence and try to restore confidence in themselves and include the child in class activities. Special Education teachers believe in the appropriate treatment to be based on personalizing the child's teaching, let the child decide when to participate in classroom activities, apply self-assessment techniques, apply words and letters discrimination exercises, ask the child to do the same work as other children, including child in class activities.

Research has confirmed that General Education teachers felt more pressured and helpless about the treatment of students with dyslexia (Fyssa et al., 2013). In addition, according to Smith et al. (2015), Special Education teachers were more confident in their ability to teach children with special needs, they were to a greater extent responsible for helping the child and using all the means they had and how to deal with them. students with dyslexia from personal experience. Finally, a study by Strogilos and Tragoulia (2013) showed that teachers consider effective treatment of developmental dyslexia fees and positive incentives and multi-sensory techniques to encourage students' participation in classroom activities and apply self-assessment techniques. Similarly, research by Saricam and Sakiz (2014) found that special educators had a higher sense of self-efficacy compared to music, art, and general education teachers.

Most students with dyslexia most often face obstacles when trying to read to learn. Such difficulties are decoding or trying to understand text without an adequate knowledge base (Lyon et al., 2003). Such challenges pose significant obstacles to academic performance. Teachers often try to tailor their curricula to meet the diverse needs of their students, while trying to find creative ways to engage the entire classroom potential of students (Coyne et al., 2006), or at least they should teachers are in need of adopting innovative supports, strategies and tools that make it possible to meet all students' educational needs (Hall et al., 2015).

Teachers' attitude toward inclusive education

Finally, the results on attitude toward inclusive education showed that Special Education teachers were more confident in their ability to teach children with special needs and considered that they were adequately trained to meet the needs of children with disabilities. Also, Special Education teachers agree to a greater degree that academic progress is possible in children with special needs and students with special needs should be included in regular education classrooms. In contrast, General Education teachers become more anxious when they learn that a student with special needs will be in their classroom.

According to research conducted (Black-Hawkins, Florian & Rouse, 2007), teachers' attitudes towards students with disabilities and their integration are often negative. Deficiencies in educational knowledge and skills, coupled with the lack of organized teacher training programs, are the main causes of the deterioration of the Special Education provided. Indeed, dyslexic students themselves believe that their education is degraded and believe that the main factor for this situation is the lack of specific knowledge from their teachers (Smith, Polloway, Patton, & Dowdy, 2015). At the same time, it is argued that all children, regardless of their 'disadvantage' or special learning difficulties, should be included in the general classes. This view focuses on the importance of peer interaction, the positive impact on children with and without dyslexia and the development of friendly relationships between their peers, and at the same time, there are several studies that have at times demonstrate the success of inclusion (Black-Hawkins, Florian & Rouse, 2007). In another study, Hodkinson (2010) studied the historical evolution of inclusion in the UK. Research has shown that over time the positive perception of inclusion has increased. The same conclusion is reached by Scruggs et al. (2017) in a review of research conducted during 1958-1995 on teachers' perceptions of inclusion. Specifically, the researchers concluded that, regardless of methodology, sample, time period, or geographic region, a positive perception of inclusion was recorded. Using a different methodology, a wide range of ethnographic research methods, Avramidis et al (2000), confirm Special Education teachers' positive perceptions of inclusion. More specifically, teachers express positive perceptions by arguing that inclusion respects the rights of children with special educational needs while pointing out that progress is made at the academic, social and emotional level for all students.

More generally, as Elhoweris and Alsheik (2004) point out, general education teachers are favorably inclined to include students with special educational needs in the scales related to children's legal rights but express negative views on the practical application of inclusion if teachers consider that they fail to meet the requirements of an inclusive process. In a recent study by Koutrouba et al. (2012) in secondary education, teachers' positive perceptions were also recorded in 52.9% of the total of 365 participants. However, the percentage is marginal and represents almost half of the sample. The other participants expressed significant difficulties in implementing inclusion related to: (a) lack of appropriate infrastructure, (b) inaccurate curriculum, (c) education system orientation towards achieving quantitative learning objectives and degrees, and (d) lack of training regarding with proven teaching methods and practices. Similar were the findings of Avramidis and Kalyva's (2007) research in which 155 elementary school teachers were generally in favor of inclusion. The reasons were mainly for the right of students with special educational needs to inclusive education and the opportunities for the development of the cognitive and emotional areas of all students. Certainly, there were also concerns about schools' ability to implement inclusion. At the same time, we should also add Ververi et al (2011) with data from a survey conducted in Greece. Research shows that initially there is an increased number of children with disabilities in Greece, but this school system cannot provide the necessary support to children and their inclusion teachers, and often there is a large negative social stigma.

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