PERCEPTIONS OF GENERAL AND SPECIAL EDUCATORS ABOUT INCLUSION TO STUDENTS WITH AUTISM IN SCHOOLS OF GENERAL EDUCATION

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Abstract:
Nowadays, inclusion of students with Autism Spectrum Disorder (ASD) in general education is increasing, and teachers are invited to incorporate them in their classroom. The present study attempts to investigate the views of teachers of general and special

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education on inclusion of students with ASD in the mainstream classroom. The research participants were sixteen general and special education teachers serving primary schools in the counties of Arta and Preveza during the 2019-2020 school year. The research was conducted using a semi-structured interview. According to the results of the survey, all teachers had knowledge of the disorder, but special educators had a bit more specialized knowledge. Overall, teachers expressed positive views on the inclusion of students with ASD and no significant differences were found between general and special education teachers. The characteristics of the student with ASD have been shown to be an important factor in the views of all participants regarding the choice of framework of study, as well as the collaboration between teachers for successful inclusion. In addition, the importance of continuing education on autism and inclusion has emerged as a factor with significant impact on inclusive education for all participants.

**Keywords:** autism spectrum disorder, inclusion, general education teachers, special education teachers, training

1. Introduction

In recent decades there has been a large increase in the inclusion of people with special educational needs. In Greece, Legislation (Law 3699) in 2008 on special education and training considers children with autism and other pervasive developmental disorders as students with disabilities and special educational needs (Syriopoulou-Dellis & Kassimos, 2013), which allows them participation in inclusion programs.

The role of the teacher in the effective implementation of educational inclusion is considered very important, as his attitudes are perhaps the strongest predictor of its success (Schwab, et al., 2015). However, there is difficulty in implementing inclusion, which is influenced by teachers’ prejudices and experiences, lack of tools, resources and knowledge and the behavior of children with SED themselves. (Dias & Perez, 2013)

The purpose of the present study is to determine whether the success or failure of inclusive education depends on perceptions and therefore teachers’ practices rather than on diversity itself. It also explores what kind of education teachers need to receive in order to manage heterogeneity in their classroom, and in particular students with ASD.

2. Literature Review

2.1 Inclusion

Inclusion means the full integration of children with different abilities in all areas of education ensuring the opportunities enjoyed by other children. It concerns the effort made to coexist and teach most students with SEN with their peers in their neighborhood schools and within the general classroom (Zigmond, 2003). The purpose of inclusion concerns all children, regardless of diversity, to come together and learn together, as well as to recognize and appreciate the unique abilities of each (D’Alessio & Watkins, 2009).
An initial general assessment of the factors reported to affect the integration process would be: cooperative teaching, community support, provision of appropriate specialist teaching team, the use of effective teaching strategies, the inclusion of children in teaching, integration staff always available, good cooperation with children and setting individual goals for each child's special abilities, teacher attitudes and continuous training of them, but also the severity of the disorder of the child itself, with the mildest cases being legitimate to attend general school, while the more severe to special (Gibb et al., 2007). As Norwich (2000) points out, some of the factors contributing to the successful inclusion of children with and without disabilities in mainstream schools are: curriculum adaptation for the benefit of children with special educational needs, involvement of parents and educational staff at decisions, qualified education staff and finally the contribution of society itself with financial support. Also important is the change in infrastructure, with the natural environment of the school to be accessible to persons with disabilities, as well as a change in the level of potential, namely the placement of special educators in general education schools.

2.2 Autism Spectrum Disorder

Autism is a disorder that refers to a severe form of psychopathology that usually occurs before the child's first three years of age (Mourelatou & Tsitlakidou, 2012). It is a lifelong developmental disorder of neurobiological origin, which appears to affect the way the human brain receives and processes stimuli, as well as many other areas of development (Mourelatou & Tsitlakidou, 2012).

The results of various research do not lead to clear conclusions about etiology of autism, referring to biological, genetic, environmental factors and combination of all of them. Findings that support organic / biological etiology (Pardo et al., 2005) suggest that brain dysfunction is related to chromosomal abnormalities, metabolic or autoimmune disorders, viral infections and even anatomical abnormalities of different brain regions (Varvogli, 2007). Furthermore, studies focused on families of autistic children have shown that genetic factors play a key role in the etiology of the disorder (Kakouros & Maniadaki, 2006). Other factors of particular interest in the cause of the disorder are inheritance, as siblings of children with autism are 3% more likely to develop the disorder themselves (Kalyva, 2005). Other researchers, trying to support the multifactoriality of autism (Lampi et al., 2012), also highlight the role of environmental factors, considering that specific environmental factors may act as risk factors that trigger autism manifestation.

In recent decades, there has been a sharp increase in the number of children receiving a diagnosis of ASD. According to studies, white children are more likely to be diagnosed with autism than color or Hispanic children, whilst boys are consistently more likely to have autism than girls (1/5). However, this high increase in children with autism spectrum disorder does not necessarily correspond to a real increase in the spreading of the disorder. It may also be due to factors such as the development of diagnostic criteria, early and more reliable diagnosis using appropriate diagnostic tools, better information
for parents and professionals related to ASD, as well as changes in legislation that promote better evaluation and treatment of students with SEN (Fombonne, 2005).

The three main features of people with autism are: communication disorders, social interaction disorders, and the existence of repetitive stereotyped behaviors and activities. People with autism have severe impairments in their language ability and are extremely difficult to communicate with. Another area that is greatly affected by autism is the field of social interaction. The inability of children to communicate smoothly with humans and adapt to social situations since birth has been observed (Synodinou, 2001). Finally, one of the main traits of children with autism is their persistent involvement with stereotypical movements or activities and ritual behavior. Repeated habits are a way for these children to understand the world (Lennard-Brown, 2004).

2.3 Purpose
The purpose of the present study is to investigate the issue of the education of students with autism spectrum disorders and more specifically to study the general education and special education teachers views on the inclusion of students with autism in the mainstream classroom.

2.4 Research Questions
1) What do teachers know about autism spectrum disorder (ASD)?
2) What do teachers know about the inclusion of students with SEN?
3) What are the views and experiences of general education teachers on the inclusion of students with autism spectrum disorder in the general classroom?
4) What are the views and experiences of special education teachers on inclusion of students with autism spectrum disorder in the classroom?
5) What are the teachers’ views and experiences on the other specialties involved in the process of inclusion of students with ASD in the classroom?
6) What are the teachers’ views on the factors that influence the implementation of inclusive education of students with ASD in the general classroom?

3. Method
3.1 Participants
The sample of the present study consists of sixteen individuals, of which 8 were women and 8 were men. The participants were primary school teachers who attended schools of Arta and Preveza in the 2019-2020 school year. Specifically, general education teachers who are teachers with ASD students in their classroom, parallel support teachers (special education and general education) supporting students with ASD and teachers of integration sections. The age range of the teachers ranged from 25 to 57 years, with the least years of service being two years and the most being 33. The sample selection was casual. Participants were screened using the convenient-purpose sampling method where participants were selected due to their willingness and availability.
3.2 Data Collection
The data collection method chosen is the semi-structured interview method, initially by conducting two pilot interviews in order to become familiar with the interview process and the importance of the questions be understood to the participants. Also, some questions were modified to facilitate the flow of the interview. All interviews were conducted on the day and time that were appropriate for the participants. Each interview lasted approximately 15 to 35 minutes. For the duration of the interviews, the shortest lasted 14 minutes while the longest 36 minutes, averaged 19.30 minutes. Finally, at the beginning of the interview some demographic data such as gender, age, level of education, years of service, work background, etc. were recorded.

3.3 Data Analysis
The method of analysis which was deemed most appropriate for the purpose of our research is Thematic Analysis, organizing and describing the data in detail (Braun and Clarke, 2006).

3.4 Methodological Limitations
Initially there was little difficulty in finding a suitable sample for the research, as participants had to meet certain specific criteria, such as being primary or secondary teachers and being in contact with students with special needs and even with students with ASD, either as general education teachers in a department, as a support, or as a teacher of integration section. Another limitation was that in some cases disruptive stimuli interfered with the conduct of the interview (e.g. knocking on the door, telephone, another person entering).

4. Results
Creation of 3 central themes, which are: a) knowledge of general and special education teachers for autism spectrum disorder, b) general and special education teachers’ views on inclusion of students with SEN in general education school, c) factors which influence the inclusion of students with autism spectrum disorder in the school of general education.

A. Knowledge of General and Special Education Teachers for Autism Spectrum Disorder
a. Knowledge of the definition of the disorder
Teachers as a whole (16/16) talk about the spectrum of autism and do not use only the term autism to the full because they think that every child is different and may exhibit different behaviors. Some general education teachers (3/8) use older terms such as autism or pervasive developmental disorder in their attempt to define the disorder by giving the term “lifelong” to the disorder. Most teachers (10/16) also stand by the nature of the disorder giving it neurological status.
b. Knowledge of the characteristics of the disorder
All teachers (16/16) describe the main characteristics of an autistic child taking into account examples from their experience. Most special education teachers (7/8) provide a detailed and targeted description of the characteristics, referring to three traits. General education teachers give more vague descriptions of the characteristics of children with autism and prefer to describe the characteristics of students who have attended their classroom. These include disturbances in communication with other people, difficulty in socializing and relationships with other people and the emergence of stereotyped behaviors. Other key features that are widely cited by both general education and special education teachers are the socio-emotional development of these children, their reactivity, their own perception and perception of things. They also focus on the difference in the severity of the disorder in all children with the mildest cases having the best progression, in comparison with the more serious ones.

c. Knowledge of the etiology of the disorder
The majority of general and special education teachers (11/16) believe that the issue of reasoning remains open, the reasoning is ambiguous, and they are oriented between biological, genetic and environmental causes. Also, those educators, both in special education and general education, who have either been or are being supported or are more involved in a master's degree, are more informed and have more to say about the etiology of the disorder. Finally, there are prevailing views that connect the reason of autism spectrum disorder to the administration of a certain vaccine at a young age.

d. Knowledge of the epidemiology of the disordered
All general education teachers (8/8) and the majority of special education teachers (6/8) did not have a specific view on the frequency of the disorder. They mainly emphasized that as the years go by, there is an increasing rise in the rates of autism disorder in our country. Some teachers (6/16) believe that the increase in the prevalence of ASD may be due to the possibility of better diagnosis made by services and the greater knowledge available today. Regarding the more common appearance between the two sexes, the opinions of all interviewees (16/16) converge, considering that it appears more often in boys than in girls.

B. Views of General and Special Education Teachers on the Inclusion of Students with SEN in the General Education School
a. Teachers’ views on the inclusion of students with special educational needs in the general classroom
All (16/16) teachers are familiar with the term inclusion and express particularly positive opinions. Reference is made to 'one school for all', with children attending school in their neighborhood. They talk about people with disabilities who are being educated in the formal school of general education and more specifically about people with autism, attention deficit disorder, learning disabilities, mental retardation. Many teachers, however, of both general and special education (12/16), although speaking favorably of inclusion, set conditions for the student and his or her abilities or school context and
organization. Some participants made particular mention of the situation of inclusive education in Greece, considering that inclusive education is an increasingly applicable institution in Greece nowadays and this is largely due to the funding provided by European programs such as the NSRF. There are, of course, opinions on the difficulty of implementing inclusive education in our country as some conditions are not met in schools, such as adequate logistical infrastructure, adequate staff, etc.

b. Views and experiences of general education teachers on inclusion of students with autism spectrum disorder in the general classroom

General education teachers as a whole (8/8) believe that it cannot be stated precisely whether it is better for a child with autism to attend classes in general or special schools. All of them set certain preconditions as regards the individual characteristics of ASD student, distinguishing the severity of autism disorder in each child and stressing that milder forms of the disorder can be included in mainstream schools, while more serious forms are best to attend special schools where there is adequate infrastructure and well-trained staff to assist them. It is very important to staff schools with dedicated teachers who can provide support for children with ASD in the classroom and who will be able to work better in helping this child.

c. Views and experiences of general education teachers on inclusion of students with autism spectrum disorder in the general classroom

Special educators as a whole (8/8) do not say clearly whether it is best for a child with ASD, to attend a general or special school. They set as a criterion the severity of the disorder, with high-functioning and moderate-functioning children being good at attending general schools, while low-functioning children are better to attend special schools as they can be better supported there. There is also another requirement related to the logistical infrastructure, the teaching staff and generally the means by which the school is staffed. Inclusion in general education is legitimate and very useful, but in general education schools as is the situation in Greek reality today this is very difficult because there is a lack of all the above.

d. Views of general and special education teachers on the role of different specialties in inclusive education of students with autism spectrum disorder in the general classroom

All teachers (16/16) primarily believe that there is a need for special education and parallel support, helping both the child with ASD and the classroom teacher so that the educational process runs smoothly. The role of the psychologist in the school where co-education is implemented is also very important, supporting not only the student with ASD but also the other students in the class by making them aware in the best possible way. Also, psychologists can help parents more easily accept their child’s diversity and manage their emotions. The specialties of the speech therapist and social worker are also important, helping the child to speak and socialize accordingly. There are also opinions for the existence of occupational therapist and nurse when there are organic problems. The specialties of Music, Art, IT and PE teachers and trainer are also important because
they help the children to express themselves freely, become creative and enjoy their time in class, while contributing to socialization.

C. Factors That Influence the Inclusion of Students with ASD in General Education Schools

a. The training of teachers about ASD and the application of inclusive education
General education teachers (8/8), and especially those with many years of service, believe that they are not ready to take on a child with ASD on their own without much support from a special education teacher. They have neither been trained in their studies nor have they received any specific training in ASD. Most of what they know was found out on their own initiative as they came up with a new reality. Of course, it is noted that younger teachers have a little more knowledge. Both specialist and general education teachers (16/16) think that continuous training is necessary through seminars and many more, by appropriately trained staff.

b. Factors related to different behaviors and different characteristics of students with ASD
The behavior most frequently mentioned as one that has particularly troubled teachers is the aggressiveness of students with ASD. Self-traumatic behaviors were also reported as particularly stressful situations. The issue of sexuality has also raised concerns among some educators. Other problems relate to communication deficits, resistance to change, and emotional changes that characterize people with ASD.

c. Cooperation between teachers of general education and special education
All teachers (16/16) emphasize the importance of positive co-operation between general and special education teachers in the inclusion process, talking about the benefits of exchange of knowledge between the parties involved. Most special education teachers (6/8) include the positive aspects of being treated as equitable teachers in the general education classroom. Some (2/8), however, believe that general teachers are not as well informed about inclusion as they consider special educators as primarily responsible for implementing curriculum in pupils with ASD.

d. The teacher’s cooperation with the student’s parents
All teachers (16/16) believe that it is very important for the family to accept the diagnosis and the educational context and thus have a good deal of cooperation with the teachers, who are sometimes called upon to face difficult situations. Some teachers (5/16) stand that sometimes parents may not convey the pupil’s actual image especially in relation to negative behaviors and teachers may be confronted with parents’ ignorance or ambiguity. Everyone (16/16) considers the family as a very important factor in the success of educational interventions and considers that it has a positive effect on the learning development of students with ASD. Any possible involvement of parents in school activities is also important as they gain more knowledge and can help their children more.
e. Teachers’ views for the role of formal developmental students’ attitudes towards students with ASD

All in all, teachers (16/16) consider that the role of classmates for pupils with ASD is an important factor in the success of inclusive education. Students’ formal developmental attitudes towards diversity are attributed to the knowledge, the information and the awareness they receive from their school and family. Parents of children should not believe that children with ASD will delay the learning of their own children, but should encourage them to build relationships with these children and to help them accept diversity within the school and beyond. In all cases, the positive benefits for classmates of formal development, especially in the social field, are also highlighted. Establishing relationships with formal education students also helps students with ASD to obtain self-esteem.

f. The current Greek reality and the school context as it is shaped

The problem of applying co-education is the lack of logistical infrastructure in mainstream schools, the inadequate spatial structures with small class sizes and large numbers of students, the inadequate educational facilities and the absence of specially designed classrooms, relaxation areas, puzzles, ramps, etc. It is very critical to exist a detailed program that will be tailored to all students in the classroom and will recognize the different learning abilities and needs of each child and the need for appropriately qualified staff including psychology and other disciplines. Finally, financial resources are considered essential for the success of inclusion.

5. Discussion

The results of this study are in line with the findings of other studies. The following are described in detail.

As found in a study by Mauropoulou and Padeliadu (2000), special education teachers talk about ASD in a more scientific terminology than those of general education, but without existing much difference in our research, and also the results for the reasons are confusing in both groups and in both studies (in Mauropoulou and Padeliadu, 2000 and in our study). Also, researches by Lampi et al. (2012) agree with the findings of our research attributing the etiology of autism to genetic factors, environmental factors, and multifactoriality and the existence of a childhood vaccine respectively. Finally, as cited in a study by Fombonne (2005), participants in the present study state that as the years pass, autism is increasing, with boys being more likely to develop ASD more likely than girls. Positive opinions are cited by the teachers in the present study as to inclusion, referring to the neighborhood school, a school for all, without segregations. There is also skepticism about whether all children can attend the joint program and to what extent general education schools are organized to integrate students with ASD.

Positive attitudes of teachers play a very important role in inclusion, a finding which is in line with Yuen and Westwood’s (2001) research. Our research interviewees consider that teachers’ attitudes are particularly influenced by the nature and severity of
the child’s situation where, for the most severe cases pupils attend a special school, while the lightest cases can attend general school. Similar findings have been observed in other studies (Avramidis & Norwich, 2002).

Also, the teachers in the present study on the one hand are presented positive about inclusion, as they believe that inclusion of students with ASD will help to reduce stigma and marginalization and on the other hand propose special schools as more secure and protective environments with a well-trained personnel and logistics. Research by Zoniou-Sideri and Vlachou (2006) confirms the findings.

One factor that influences teachers’ attitude towards inclusion is their knowledge, how well and capable they feel and their degree of self-efficacy, with special education teachers having slightly more positive views and considering themselves capable of coping with learners with ASD. All teachers also talk about the need for training. The above findings of the present study are also in line with those of another earlier research by Loiacono & Valenti (2010), Pearson (2009).

The teachers in the present study talk about the need for collaboration between general and special education teachers in inclusion, while at the same time, everyone believes that collaboration also benefits the exchange of knowledge between general and special education teachers, which helps both of them do their job better. Studies by Finke et al. (2009), Soulis (2008) and Strogilos et al. (2012), McDuffie et al., (2007), respectively, confirm the above findings.

The success of inclusion, according to the teachers, is related to the pupil’s with ASD own behavior, such as child aggression, inappropriate sexual behavior, communication deficits, resistance to change and emotional changes. These behaviors primarily concern teachers and make children with ASD socially isolated from their peers. All of these behaviors are also reported by teachers in another research (Jordan, 1997).

An important factor in the successful outcome of inclusive education is the attitudes of formal education students towards their ASD classmates, as reported in the present study, with teachers believing that informing and sensitizing their children to diversity will help them empathize and accept their classmates. In addition, interviewees talk about the role the parents of typically developing children play, believing that parents can inform and raise awareness of their formal education student about the existence of a child with ASD, making integration smoother. All of the above findings are also confirmed by research by Triliva et al. (2008) and Koster et al. (2007).

The current Greek reality and the shaping of the Greek school context are referred to many teachers’ responses to the present research, speaking about changes in curricula, changes in spatial structure, need for funding. Studies by Desimone et al. (2013), Polychronopoulou (2012); Cornwall & Graham-Matheson, (2012); ERO, (2013) confirm the above findings.

According to the teachers, schools should be staffed with many activities such as music, visual arts, physical education, computer science, which are enjoyable and contribute to the socialization and development of play and cooperation skills in students.
with ASD. Psychologists, social workers, speech therapists, occupational therapists are also mentioned as important specialties to exist in a school where inclusion takes place. These findings are consistent with researches by Brown, (2004); Arbeiter & Hartley, (2002).

6. Conclusions

In recent decades there has been increasing debate about the inclusion of students with SEN in the mainstream school, including students with ASD. Educational policies aimed at inclusion result in increased demands and challenges in the workplace for teachers, both in general and in special education working in mainstream schools. It should also be noted that in recent years there has been a sharp increase in the rates of autism in our country, which has led to the creation of many jobs for special education teachers and other special education and specialist support staff.

In the present study, special education teachers appear to be more knowledgeable about the inclusion of students with ASD than general teachers, but the differences are small, as many teachers hold or are in the process of developing a postgraduate degree in special education.

Positive is the perception of all teachers in the institution of inclusive education of people with SEN, and more specifically of students with ASD, but they set some conditions on the pupil and the educational context, talking about low and high functioning students, lower number of pupils per class, staffing of schools with logistical infrastructure, adequate educational facilities and sufficient qualified staff. Training is also important for both general education teachers and special education teachers.

An important factor for the success of inclusive education seems to be the collaboration between general education and special education teachers, with all teachers considering that the good communication, the joint effort to formulate the student program, the involvement of both general and special teachers in the education of students with ASD, the acceptance of the student with ASD as an equal member of the class, contribute greatly to the success of the inclusion program.

Finally, the best school choice for students with ASD is referred by the teachers to be the general school, as being equipped with special education teachers and other specialties, while in serious cases of ASD, pupil attendance at a special school or special class is best.

7. Research Limitations

At this point it is important to note that while the questions we have attempted to address through this survey have been answered satisfactorily, however, some limitations have emerged. A very important limitation is the small and opportunistic sample that makes it difficult to generalize the results to the general population. Another limitation concerns the participation of only general and special education teachers in the research, with non-
presentation and views of other specialties, of principals, which are essential for a comprehensive view of the subject. It can also be added to the limitations that most interview participants were general and special education teachers who had or were in the process of developing a master’s degree program in special education, so they had recently dealt with the subject. Also, the interview area was not controlled, resulting in many disruptive factors (telephone ringing, bell ringing). Last but not least, another assumption of the research concerns the fact that we accept as honest the answers given by the teachers, which given us some degree of validity of the present research.

8. Research Proposals

It is important to further explore the issue of including children with ASD in the mainstream school by including the views of everyone involved in this process. It is also useful to find a larger sample and to use the random sampling method in order to get participants to provide us with rich information on the issue that concerns us in order to have more secure conclusions in the future and generalizability to the general population. Finally, it would be important that the results of the present study be used in teacher training programs in order to better organize inclusion.

References


