

Exploring the views of primary school teachers on the inclusion of students with autism spectrum disorder in the school context

Sofia Saripanidou and Nikolaos Apteslis

Abstract

With the increasing appearance and diagnosis of students with Autism on the world map, as well as the inclusion of students in the general school context, it is necessary to study and identify the views of teachers serving General Education, regarding whether they are friendly with this inclusion. Today, more and more students with Autism Spectrum Disorder are attending General Schools, among typically developing students. Teachers' views on the inclusion of these students significantly affect the success and effectiveness of this practice. This research was carried out in order to identify the positions of teachers through a questionnaire of four branches, which were called to complete. The results show the current climate in General Education for inclusion and indicate the need for training on Autism Spectrum Disorder in all education providers, so that we can receive more positive feedback on inclusion.

Keywords: inclusion, Autism Spectrum Disorder, Teacher Perspectives, General School Framework

Introduction

Autism is a common developmental disorder characterized by communication deficits, social interaction disorders, and limited or repetitive behaviors (Segall, 2008). It is a complex, lifelong neurological disorder that can affect all racial, ethnic and socioeconomic groups (Seymour, 2017). The etiology of Autism Spectrum Disorder remains partially unexplored (Lord, Cook, Leventhal & Amaral, 2000). Others claim to be responsible for biological factors, while others claim to be responsible for environmental factors (Dietert et al., 2011). It is a heterogeneous disorder, both etiologically and phenotypically. It is a common diagnosis in children, especially in recent years (Priya, Damodaran & Arumugam, 2011). The nature of Autism is such that many disorders are included in it and for this reason, the term can also be attributed to Autism Spectrum Disorder (hereinafter DAF). It is considered a spectrum condition because even if people with autism share the same basic symptoms, the way these symptoms present and manifest in each person varies greatly (Veselinova, 2014).

In recent years, cases of people with autism have multiplied compared to previous years. Specifically, the incidence is now 20 to 30 times higher than in 1970, when the first epidemiological studies were conducted (Seymour, 2017). The increase observed led researchers to look for ways in which these individuals could be trained. From this search, we now come to the practice of including and educating students with autism in general school. Their training is usually carried out by a parallel support teacher. The continuous development of the practice of inclusion, it is certain that will lead to the integration and inclusion of all students with Special Educational Needs in the General School (Stasinou, 2016). This perspective aims to provide equal education to all students regardless of gender, nationality, religion, mental background, etc., who will attend the same school and will be able to attend the same course through differentiated teaching and through the application of inclusion practices (Angelidis, 2011).

In order for this method to be possible, it is necessary to have teachers who are properly trained and friendly to the inclusion of all students, regardless. With teachers who are positive about inclusion and inclusion, we are one step closer to im-

plementing the new school model, which will dispel any discrimination and marginalization of “weak” groups of students.

Autism

The term psychiatry was first coined by psychiatrist Eugen Bleuler in 1906, who linked the term to the Greek word “self” and defined it as “state of the self” (Deisinger, 2012; Parisi A. & Parisi S., 2019; Piskorz-Ogórek et al., 2015; Polychronopoulou, 2012). Until the late 1960s, Autism was called “pediatric schizophrenia” (Fombonne, 2005; Deisinger, 2012).

Kanner, however, in 1943 clarified the two terms “Autism” and “Schizophrenia” and separated them (Fombonne, 2005). In the early 1940s, Hans Asperger described some cases of children with deficits in their social development, peculiar language development, and limited stereotypical interests (Kakouros & Maniadaki, 2006).

Much later, in 1976, the British psychiatrist Lorna Wing spoke and described for the first time the “Trinity of Deficiencies” also known as the “Wing Deficit Trinity”, with which she gave her own definition of Autism and its characteristics. (Stasinou, 2016). The “Wing Trinity” refers to the three areas in which the deficits of individuals with Autism, in other words, in the fields of socialization, communication and imagination (Kalyva, 2005). The Wing Trinity concerns the following areas:

- ▶ Serious social isolation (the child tends to be isolated, closed to himself and to avoid compromising and having relationships with other people),
- ▶ The peculiarities of communication (the child often avoids eye contact, even informal language, and usually avoids communication with people, even with relatives) and
- ▶ The need to maintain resemblance (the child tends to keep his environment unchanged, causing him to react even violently in the event of a change in his routine) (Polychronopoulou, 2012; Stasinou, 2016).

Following the various definitions introduced in the research field of Special Educational Needs, the definition that ultimately prevailed over Autism and is still valid today is: Au-

tism is defined as a disorder characterized by impaired social communication, limited interests and activities and more recently, informal reactivity to sensory inputs (APA, 2013).

Today Autism is found in 50-60 out of 10,000 school-age children (Chakrabarti & Fombonne, 2005; Stasinou, 2016). The disorder is more common in men than in women (Fombonne, 2005; Wing, 1981). Their ratio is 4: 1, with more men.

In the stages of coping with Autism, early diagnosis and intervention play a dominant role. The earlier the diagnosis is made, the sooner a plan will be made to provide specialized intervention. In dealing with this disorder, the school also plays an important role, which in cooperation with the family and the specialized bodies, provides the appropriate support that the student needs in order to achieve his inclusion in the school context (Patel & Curtis, 2007).

3. The inclusion of students with Autism at school Since the mid-1990s, with UNESCO's Salamanca Declaration on Exclusive Education, commitment to the inclusion of all students has increased for all, regardless of disability, and has grown steadily to this day. The number of students with disabilities in regular general schools (Lynch & Irvine, 2009; Ofsted, 2004).

Inclusion is a movement that seeks to create schools and other social institutions based on meeting the needs of all students as well as respect and education in all kinds of diversity (Ofsted, 2004; Salend, 1998; SEED, 2005). Numerous recent large-scale studies have shown that the inclusion of these children is a significant challenge for some teachers (Batten and Daly, 2006; HMIE, 2006; Jones et al., 2008).

Schools that embrace inclusive practice seek to create student communities, educating them all together in general education rooms designed for all ages, in the schools of their neighborhood. This practice contributes positively to the treatment of Autism, as it provides both social and academic benefits.

Of course, inclusive education has positive results provided that it is implemented by teachers who have been properly trained for this job. In addition, the teachers' views on the practice of inclusion are an important and decisive factor

in the success of inclusive education for students with ASD. That is, the staff responsible for the success of the inclusion must have encouraging views on policy in order to maximize the chances of success of this application (Segall, 2008).

Methods

The purpose of the research The research was aimed at identifying the views of primary school teachers on the inclusion of students in the autism spectrum. That is, whether or not they were positive about the inclusion and creation of a personalized action plan for children with autism who have been, are, or will be in their classrooms. Identifying teachers' views is a research of the utmost importance for today's society. Today, in an effort to create and establish the "School for All", the positive attitudes of teachers towards the inclusion of people with autism is a very important step in consolidating this idea. However, by identifying possible negative attitudes of teachers, we have the potential to help strengthen teacher education and training programs for the inclusion and teaching of people with disabilities.

Data collection tool

Three of the five parts of the Autism Inclusion Questionnaire (AIQ) questionnaire, built and used in 2008, were used as a means of collecting data for Matthew Joel Segall's research on the inclusion of students with ASD in the school context. This questionnaire consists of five appendices.

The first part of the questionnaire concerns the demographic data of the participants and their professional experience.

The second part focuses on identifying the existing knowledge of the participants regarding the Autism spectrum. This section includes twenty (20) questions, the answers to which are formatted with the Likert scale and in particular, the six answer options range from absolute agreement to strong disagreement (1 = I totally agree, 2 = I agree, 3 = No I agree or disagree, 4 = I disagree, 5 = I completely disagree, 6 = I don't know).

In the third part, there are twelve (12) statements and the

teachers were asked to evaluate how annoying some of the behaviors of children with ASD in their classroom are. The answers here are given on a Likert scale, 5 graded answers (1 = Very annoying, 2 = Annoying, 3 = Somewhat annoying, 4 = Minor annoying, 5 = Not at all annoying).

One hundred primary school teachers from schools in Greece took part in this research, completing the questionnaires given to them. There was a need for both general education and special education teachers to take part in the research, so that we can identify similarities and differences between their answers. In the end, even general and special education teachers participated in the research, giving us a more complete picture of their views. Following the collection of the questionnaires, they were analyzed and the results of the research were extracted, using the SPSS IBM statistical tool. The results of the research are then analyzed.

Research Questions

1. Do primary school teachers agree with the inclusion of people with autism in formal education?
2. Are demographic variables (age, gender), and the level of education, the years of teaching, the type of school, and the specialized training in autism related to the attitudes of teachers toward the inclusion of students with autism in public schools?
3. Are primary school teachers properly trained to be able to differentiate their teaching in order to include people with autism in formal education?

Results

Participants

The majority of participants were Women (94%), the predominant age was 20-30 years (46%), most belonged to General Education (46%), with 44.3% having a degree in General Education. The majority, held 1 - 5 years of service (68%) and about half of the participants hold some kind of certification in Special Education (54%).

Views on Inclusion

From this part of the questionnaire, we see that more than 90% of the participants consider it important to have parallel support for the success of the inclusion as well as the behavior of the teacher as a key factor in achieving the inclusion of students with ASD. More than 80% consider encouraging students with ASD to interact with typically developing students, an important factor in the success of inclusion, and agreed that interacting students with ADHD with typically developing students will have positive results.

In addition, more than 70% of the sample considers the severity of the disorder as an important factor in the successful inclusion of a student with Autism and considers the student's personality important for his or her integration. It wants all children with special educational needs to be integrated into general education and agrees that inclusive education improves the learning experience of students with disabilities.

Table 1 - Views on Inclusion

Statements	Agreement	Disagreement	Neutrality
The severity of the disorder is an important factor in the successful inclusion of a student with Autism	78%	4%	18%
Children with Autism should be integrated into general education..	70%	6%	24%
The help of a supportive teaching professional (ie parallel support) is an important factor for the successful inclusion of a student with Autism..	91%	2%	7%
The student's academic ability is an important factor in his / her successful integration	51%	16%	39%
The personality of the student with Autism is an important factor for its successful integration	75%	4%	21%
The behavior of the teaching staff is an important factor for the successful inclusion of a student with Autism	91%	1%	8%

All students with Autism should be included in the general education framework	50%	16%	34%
Children with special educational needs need to be integrated into general education..	71%	3%	26%
The Special Educational Staff (eg parallel support) is an important factor in the successful inclusion of a student with Autism..	92%	2%	6%
Encouraging students with Autism to interact with typically developing peers is an important factor in their successful inclusion.	91%	2%	7%
Medication and medication is an important factor in the successful inclusion of students with Autism.	22%	28%	50%
Only teachers with further special educational experience are expected to deal with students with special educational needs in the school environment.	30%	47%	23%
Inclusive education improves the learning experience of students with disabilities	77%	3%	20%
Students with Autism are very «weak» and «unable» to take advantage of the activities of a general school	5%	76%	19%
A good General Education teacher can do a lot to help a student with Autism	71%	2%	27%
Discreet financial resources should not be allocated to the inclusion of students with Autism..	6%	77%	15%
Students with disabilities can benefit from contact with students with Autism..	89%	1%	10%
Special schools are the right place for students with Autism.	7%	59%	34%
It is important that students with Autism receive special educational services at the General School	90%	3%	7%

Behaviors in the classroom

At this point, participants were asked to note whether or not some children with Autism Spectrum Disorder were bothered by them. Collectively, the table shows what behaviors were or were not annoying to them.

Table 2- Behaviors in the classroom

Behavioral	An-noying	Not annoy-ing
Aggression (in peers or adults).	67%	33%
Lack of awareness of what the teacher is doing	69%	31%
Difficulty in mutual discussion (dialogue)	40%	60%
Avoid eye contact	45%	55%
High levels of mobility (hyperactivity))	75%	25%
Unstable emotionality (eg inappropriate stress or inappropriate laughter)	67%	33%
Lack of relationships with peers	72%	28%
Non-compliance with teachers' orders	80%	20%
Employment with a specific object or game	66%	34%
Non-verbal communication problems (strange gestures or grimaces)	47%	53%
For no reason voices, crying, anger	78%	22%
Sensitivity to sounds	45%	55%

Several behaviors, high rates of harassment among teachers, with non-compliance with the teacher's instructions (80%), screams, crying and unexplained outbursts, (78%), high levels of mobility, (75%), lack of relationships with peers, (72%), lack of awareness of what the teacher is doing, (69%), aggression, (67%), unstable emotionality, (67%) and engagement with a specific subject (66%) to occupy the largest percentages.

Teaching practices and strategies

In the last part of the questionnaire, the teachers were asked to answer whether they know, have used and are effective and certain teaching practices and strategies in their students, who had Autism Spectrum Disorder.

More than 75% of participants knew the strategies outlined. More use is made in the Strategies of Verbal Reinforcement (86%), Additional Activity Completion Time (79%), Game-Oriented Strategies (73%), Behavior Analysis (70%), Social Stories Teaching (Social Stories). (69%) and the Pecs Communication System (59%). All strategies received positive responses for their effectiveness by 70% or more.

Discussion

As can be seen from the results of the research and with regard to the first research question of the research, "Do primary school teachers agree with the inclusion of people with autism in formal education?" as a result, it seems that for the most part teachers are friendly to inclusion. Their answers show teachers who are willing to deal with students with SEN and DAF and accept their inclusion in the general school since they consider this school more appropriate than the special school context. The results of the research were shown by teachers who support the inclusion and its results, and are against the practices that have now happily been eliminated (eg compulsory drug treatment, isolation, etc.).

Then, with regard to the second research question, "Demographic variables (age, gender), and the level of education, the years of teaching, the type of school, and the specialized training in autism, are correlated with attitudes of teachers against the inclusion of students with autism in public schools? ", it seems that the demographic variables that affected the research result are age, level of education and specialized training in autism. It was observed that the older ages were mostly those who recorded more responses that were not clearly positive for the inclusion of students with ASD.

Furthermore, negative responses to inclusion were noted by people in general education, with no experience with students with ASD and without specialization in the field of Special Education. The responses of these individuals corresponded to repetitive responses such as "Almost", "Neither agree nor disagree", "Very annoying behaviors".

Finally, regarding the third and final research question "Are

primary education teachers properly trained to be able to differentiate their teaching in order to include people with autism in formal education?", Judging by the results of the second and fourth part of the questionnaire, it seems that most of the sample is properly trained to differentiate its teaching. This conclusion stems from the fact that the questions concerning the inclusion of students with ASD in the general school context were basically positive and in combination with those concerning the teaching strategies, the teachers seemed to have dealt with these strategies at least some times in their teaching process. This means that the majority of teachers are able to differentiate their teaching in order to achieve inclusion, as teachers have a positive attitude towards it and already know and / or use many strategies for inclusion and teaching of these students.

The differentiation of teaching and whether and to what extent teachers are in favor of it can be better answered by the fourth part of the questionnaire. The practices presented in this section are among the most common practices for the inclusion of people with ASD and if nothing else, since such a large percentage of teachers were in their class.

It is natural for students with ASD to know these practices whether they have received some specialization or not.

Therefore, if we take into account the fact that many teachers do NOT specialize in Special Education, and that an equally satisfactory percentage of teachers have had people with ASD in their class as well as the answers given in the last part of the questionnaire, we conclude that Teachers are willing to engage and educate themselves, even in the field of Special Education, in order to achieve the inclusion of students with ASD, who attend their class.

References

1. Angelidis, P. (2011). "Pedagogical inclusion". Interaction, Athens.
2. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Washington, DC: Author.

3. Batten, A., Daly, J. (2006). *Make School Make Sense: Autism and Education in Scotland: The Reality for Families Today*. London: National Autistic Society.
4. Chakrabarti, S., Fombonne, E. (2005). Pervasive developmental disorders in preschool children: confirmation of high prevalence, *American Journal of Psychiatry*, 162(6), 1133-1141. DOI: <https://doi.org/10.1176/appi.ajp.162.6.1133>.
5. Deisinger, J.A. (2012). *Autism Spectrum Disorders: Inclusive Community for the Twenty-first Century*. Charlotte, N.C.: Information Age Publishing. Retrieved from: <http://eds.b.ebscohost.com/eds/ebookviewer/ebook/ZTAWMHh3d19fNDY5N-zY3X19BTg2?sid=ae0aed8f-e16f-4acd-ac43-6f345c43e714@sessionmgr101&vid=17&format=EB>.
6. Dietert R.R., Dietert J.M., Dewitt J.C. (2011). Environmental risk factors for autism, *Emerging Health Threats Journal*, 4:1, 7111, DOI: 10.3402/ehth.v4i0.7111
7. Fombonne, E. (2005). The Changing Epidemiology of Autism. *Journal of Applied Research in Intellectual Disabilities*, Vol. 18 Issue 4, p281-294. DOI: 10.1111/j.1468-3148.2005.00266.x.
8. HMIE (HM Inspectorate of Education). (2006). *Education for pupils with autism spectrum disorders*. Livingston: HMIE.
9. Jones, G., English, A., Guldberg, K., Jordan, R., Richardson, P., Waltz, M. (2008). *Educational provision for children and young people on the autism spectrum living in England: A review of current practice, issues and challenges*. <http://www.autismeducationtrust.org.uk/en-GB/Resource/Research.aspx> (accessed March 2010).
10. Kakouros, E., Maniadaki, A., (2006). "Psychopathology of children and adolescents" - Developmental approach, Athens: Typothito / Dardanos.
11. Kalyva, E. (2005). "Autism Educational and Therapeutic Approaches", Athens: Papazisis
12. Lord C, Cook, E.H, Leventhal, B.L, Amaral, D.G. (2000). Autism spectrum disorders. *Neuron*, 28(2): 355–63.
13. Lynch, S.L., Irvine, A.N. (2009). "Inclusive Education and Best Practice for Children with Autism Spectrum Disorder: An Integrated Approach." *International Journal of Inclusive Education* 13: 845–859. doi:10.1080/13603110802475518.
14. Ofsted. (2004). *Special educational needs and disability: Towards inclusive schools*. London: Ofsted.
15. Parisi, A., Parisi, S. (2019). Autism, 75 years of history: From psychoanalysis to neurobiology, *AIMS Molecular Science*, Volume 6, Issue 1, 20–26 DOI: 10.3934/molsci.2019.1.20.
16. Patel, K., Curtis, L.T. (2007). A comprehensive approach to treating autism and attention-deficit hyperactivity disorder: a pre-pilot study, *The Journal of Alternative and Complementary Medicine*, Vol. 13, No. 10, pp. 1091–1097. Retrieved from: <http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=2&sid=9c662092-4836-40cd-b1ea-84a52d3a0a2c%40sdc-v-sessmgr03>.
17. Piskorz - Ogórek, K., Ogórek, S., Cieślińska, A., Kostyra, E. (2015). Autism in Poland in comparison to other countries. *Polish Annals of Medicine*. 22(1):35-40. DOI: <http://dx.doi.org/10.1016/j.poamed.2015.03.010>.
18. Polychronopoulou, S. (2012). "Children and adolescents with special needs and abilities". Athens: PRIVATE company.
19. Priya, L., Damodaran, M., Arumugam, G. (2011). Urinary oxidative stress markers in children with autism, *Redox Report*, 16:5, 216-222, DOI: 10.1179/1351000211Y.0000000012.
20. Salend, S.J., Garrick Duhaney, L.M. (1996). The impact of inclusion on students with and without disabilities and their educators. *Remedial and Special Education*, 20:2, 114-126.
21. SEED (Scottish Executive Education Department). (2005). *Education (Additional Support for Learning) (Scotland) Act*. Edinburgh: SEED.
22. Segall M.J. (2008). *Inclusion of students with autism spectrum disorder: educator experience, knowledge, and attitudes*. (Unpublished Master's thesis). University of Georgia, Athens, USA. Retrieved from: https://getd.libs.uga.edu/pdfs/segall_matthew_j_200805_ma.pdf.
23. Seymour, K. (2017). *Inclusion of Students with Autism: Teacher Perceptions Regarding Evidence-Based Strategies and Staff Supports in Pennsylvania*. Theses and Dissertations, Lehigh University. Retrieved from: <http://preserve.lehigh.edu/etd/2800>.
24. Stasinou, D.P. (2016). *Special Education 2020 plus*. Athens: Papazisis Publications.
25. Veselinova, C. (2014). Introductory awareness of autistic spectrum conditions. *Nursing and Residential Care*, 16(1), 40–44. doi: 10.12968/nrec.2014.16.1.40.
26. Wing, L. (1981). Sex ratio in early childhood autism and related conditions. *Psychiatry Research*, 5(2), 129–137. Doi: 10.1016/0165-1781(81)90043-3.